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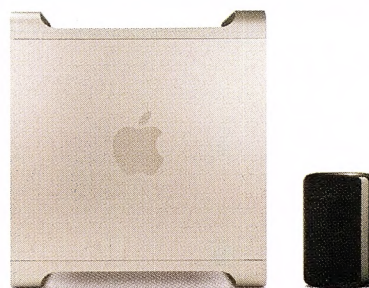
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Big changes coming to the iPhone

The iPhone will be bigger. That is the constant theme we keep hearing in the lead-up to Apple's most exciting event of the year. And I hope it is for both Apple and me.

I am not a Doomsday preacher; the financial numbers coming out of Cupertino continue to break records and I cannot foresee this ceasing anytime soon, but I think it is time for a change.

I am not talking about innovation – the idea of innovation is skewed. The word should be held for new chapters in the tech world, the creation of a new product category or significant advancement. I am talking, rather, about the next step for the smartphone that I use.

The iPhone saw a physical change in 2010 with the arrival of the iPhone 4, a beautiful change with the iPhone 5 and a slight adaptation with the iPhone 5c.

This month I want to see another change and if Apple sticks to its current trajectory, I'll get my wish.

But what does that entail? A new low-end model? A 5.5in display? An improved camera? Faster processors? A new shape? Yes, to all of the above.

If Apple reaches into its bag and pulls out two new larger models, they would serve as the mid- and top-end offerings. While some may see this as Apple

conceding to the pressure, as it could be claimed it did with the iPad mini and iPhone 5c, the company won't be worried as the results are snatched off the shelves.

The fear that cheaper models would cannibalise the top-end has been countered by the success of the iPhone 5s, and so Apple should unveil two new models with larger displays.

A lot of the rumours have surrounded 4.7in and 5.5in models, but there has been nothing on the iPhone 5c. Will it continue in its current form or receive an update to include features such as Touch ID? I think the latter. Apple has continued to offer a two-year-old model as the base smartphone in its line-up and I think an updated iPhone 5c would be an appealing prospect for first-time Apple buyers.

Despite the number of correct rumours going into the iPhone 5s/5c launch this time last year, Apple managed to announce an exciting amount of surprises at WWDC in June. Fingers crossed there are a few to come this month, but I'm hoping the 4.7in and 5.5in iPhones make an appearance.



STAFF PICKS

What would you like to see in the next iPhone?



JONATHAN STEWART

BATTERY

My iPhone runs for a day without issue, but a bigger battery would provide some peace of mind – even if it adds a little bulk.



MADELEINE SWAIN

KEYBOARD

Apart from a game-changing low price so I could actually afford one? A bigger keyboard, tired of typing mistakes.



TYNAN MCCARTHY

NFC

I hoped for NFC in the last two models. Would be really handy to be able to make small transactions with nothing but your phone.



MONIQUE BLAIR

WATERPROOF

In the next iPhone, I would really like to see a waterproof feature for underwater photos and videos of snorkelling and friends at the beach!

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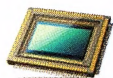
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HAVE YOUR SAY

LETTER TO THE EDITOR

MY PERFECT PHONE

After a couple of months of using both an iPhone and an Android phone (LG G2) I think I have finally worked out what my 'perfect' phone would be.

The most important thing is screen size, the 5in display on the G2 is absolutely gorgeous and blows any of the displays on the iPhone out of the water.

The second most important thing is speed – having not used an iPhone 5s, I cannot comment on its speed, but the G2 is faster than the iPhone 4s and any iPhone 5 that I have used.

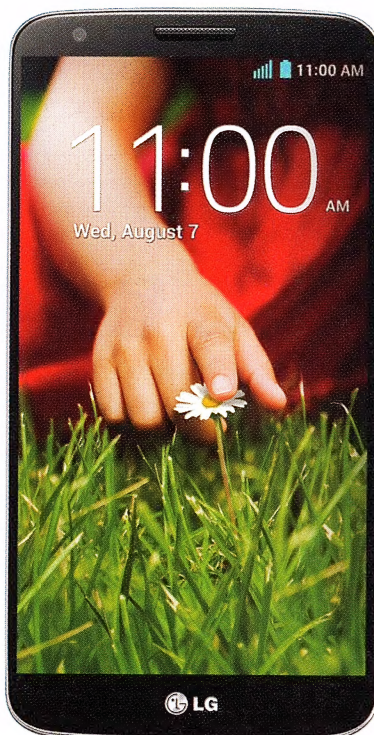
The third most important thing is stability and I'm afraid that at the moment the G2 wins here – iOS 7.1.2 is not that stable on either my iPhone 4s or my wife's iPhone 4. And let's not even start on iOS 8; it has a long way to go before it is ready for primetime use in my experience.

Fourth, updates to the OS – Apple wins here hands down. You can rest assured that your iPhone will get iOS updates for years after its release. Unfortunately, this is not the case with Android; my G2 has been updated to KitKat (4.4), but I suspect that there will be no official upgrade path for 4.5 (the 'L' series of Android).

The fifth thing is customisation. This may not be everyone's cup of tea, but I love the fact that on Android I can choose which email app, web browsers, SMS app etc, to use and make my default. I also love being able to customise my lock screen, so that at a glance I can see the weather, email and calendar on a single screen without needing to scroll or swipe.

In summary, I guess that my ideal phone would be a 5in screen phone running a new version of iOS that was as customisable and extendable as Android. I think that iOS is starting to move in the right direction and perhaps, by the time iOS 8.1 or maybe iOS 9 comes out, my dream may become a reality.

Jamie Dobbs



Trust This Computer?

Your settings and data will be accessible from this computer when connected via USB or Wi-Fi.

Trust

Don't Trust

SCHOOL MENTALITY

In reference to the news that a security research team has found a backdoor into iOS, 'Apple responds to allegations of iOS 'backdoor' from hack conference' (bit.ly/1vdLQ0d), we shouldn't trust any of these devices to safeguard us – our property or our information – but we do.

While this feature/backdoor may not be all that convenient to take advantage of, somebody will one day find a way. Besides, it isn't like we can trust any company or government to act in our best interests.

We are sitting ducks and we know it, but we are too addicted to the conveniences offered by technology and we have already made the compromise. To use another wildlife analogy, we have decided to use the security strategy that schools of sardines use, in the face of sharks, dolphins etc – hope someone else gets eaten first.

Udi

WHERE IS THE FUNCTIONALITY?

Apple used to pride itself on the functionality of its products; however, this did not necessarily apply to the

minor details. I would like to see Apple locate all model details, serial numbers and the like in really obvious and easy to find places.

I would also like the characters to be big enough to be readable without a magnifying glass in bright sunlight. The same goes for accessories such as cables, with the orientation (e.g. USB and iPod 30-pin connectors) clearly marked, not with a tiny grey mark that is hard to see in poor light. I know that the lightning connector goes in either way, but the others are very poor.

MacProf Geelong

FOR BUSINESS? MAYBE NOT...

In regards to *Macworld Australia's* online article, 'Why the iPad makes sense for business' (bit.ly/1nuH1Wy), the fact that Apple is partnering with IBM suggests just the opposite to me.

The iPad is not a viable business device. We have many iPads deployed that do little more than give the employee the ability to read email, take notes and browse the web. Yes, you can link a VPN (virtual private network) to our network and use an app to RDP (remote desktop protocol) into a platform that actually has business software installed to do some real work, but working like that is about as painful as having a root canal.

Sorry, but the fact that someone even had to write this article is telling as to how viable the iPad really is as a business device.

Perspective

THOUGHTS ON THE IPHONE 6

I love the concept of a bigger screen – I'm getting older and prefer not to squint. But I hope it doesn't get too big to hold in one hand, I have tiny hands.

Gillian

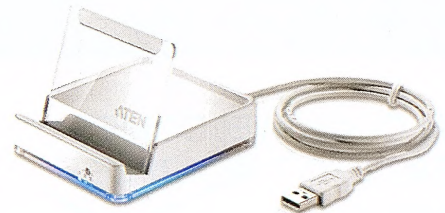


■ Letters should be emailed to editor@macworld.com.au with a subject header of 'Letter to the Editor' or by post to: Macworld Australia Mailbox, 142 Dorcas Street, South Melbourne, Victoria, 3205. Please include your full name and address, including state or territory.

■ Comments on stories or Forum posts on www.macworld.com.au are also eligible for the prize.

■ We reserve the right to edit letters and probably will.

■ Letters of fewer than 200 words are given preference.



This month's prize to the *Macworld Australia* reader who submits what we think is the most interesting letter is an Aten CS533 Tap, worth \$69, from Anyware.

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TERMS AND CONDITIONS. Letter of the month 1. Instructions on how to enter form part of these conditions of entry. 2. To enter send tips or queries to editor@macworld.com.au with a subject header of "Letter to the Editor". Entries will be judged by the editorial staff of *Macworld Australia*. The judges' decision in relation to any aspect of the competition is final and binding on every person who enters. No correspondence will be entered into. Chance plays no part in determining the winner(s). Each entry will be individually judged based on its degree of interest. 4. Employees, their immediate families and agencies associated with this competition are not permitted to enter. 5. The Promoter accepts no responsibility for late or misdirected entries. 6. The best entry/entries as determined by the judges will win the prize(s). 7. The Promoter is neither responsible nor liable for any change in the value of the prize occurring between the publish date and the date the prize(s) is claimed. 8. The prize(s) is not transferable and will not be exchanged for cash. 9. The winner(s) will be notified by email. 10. All entries become the property of the Promoter. 11. The collection, use and disclosure of personal information provided in connection with this competition is governed by the Privacy Notice. 12. The Promoter is Niche Media Pty Ltd of 142 Dorcas Street, South Melbourne, Victoria 3205 Ph 03 9948 4900, (ABN 13 064 613 529).

HOT STUFF

A selection of Apple, Mac and iOS news from Macworld.com.au

Welcome to the family.



TIM COOK WELCOMES BEATS TO THE APPLE FAMILY

It was back in late May that Apple announced it was buying Beats Electronics and Beats Music, but in August, Apple CEO Tim Cook officially welcomed the company to the Apple family.

Cook posted a welcome message on Twitter and linked to a new splash page on Apple's site that welcomes Beats into the fold:

"Today we are excited to officially welcome Beats Music and Beats Electronics to the Apple family. Music has always held a special place in our hearts, and we're thrilled to join forces with a group of people who love it as much as we do. Beats co-founders Jimmy Iovine and Dr. Dre have created beautiful products that have helped millions of people deepen their connection to music. We're delighted to be working with the team to elevate that experience even further."

"And we can't wait to hear what's next."

A similar page on Beats' site lauds Apple's long history in music making, including the Mac's history in digital recording, as well as the impact of the iPod, iPhone and iPad.

The additions come just a couple of days after the Apple-Beats deal was approved by European Union regulators, who deemed there to be no threats to competition.

However, all may not be sunny in Cupertino: *Re/code* reported in August that Apple will lay off around 200 of Beats' 700 employees; an Apple spokesperson also told the site that the company will "work hard during this time to find as many of these Beats employees as we can another permanent job within Apple".

Additionally, Beats (and, by extension, Apple) has also found itself in legal crosshairs over a patent suit launched by audio company Bose, which alleges that some models of Beats' headphones infringe on Bose's noise-cancelling patents.

Beats' Iovine and Dr. Dre are set to report to Apple senior vice president of software and services, Eddy Cue, but the company has given little in the way of details about how the two companies and their product lines will mesh after the acquisition. Though, given Apple's penchant for making music-related announcements in spring, we could hear more about that in the coming months.



APPLE, SAMSUNG AGREE TO SETTLE PATENT DISPUTES IN AUSTRALIA

Apple and Samsung Electronics have agreed to end their patent litigation outside the US, in an indication of a softening of their dispute that has extended across many countries.

The two companies have patent litigation against each other in nine countries outside the US, including Australia, South Korea, Japan, the Netherlands, Germany, France, Italy, Spain and the UK.

Patent lawsuits between the rivals will continue in the US, including two in the US District Court for the Northern District of California, San Jose division. In both lawsuits, Samsung was ordered after jury trials to pay damages to Apple.

Competitors in the marketplace for smartphones and tablets, the companies have tried to block sales of each other's products in various countries.

"Samsung and Apple have agreed to drop all litigation between the two companies outside the United States," Samsung said in a recent emailed statement.



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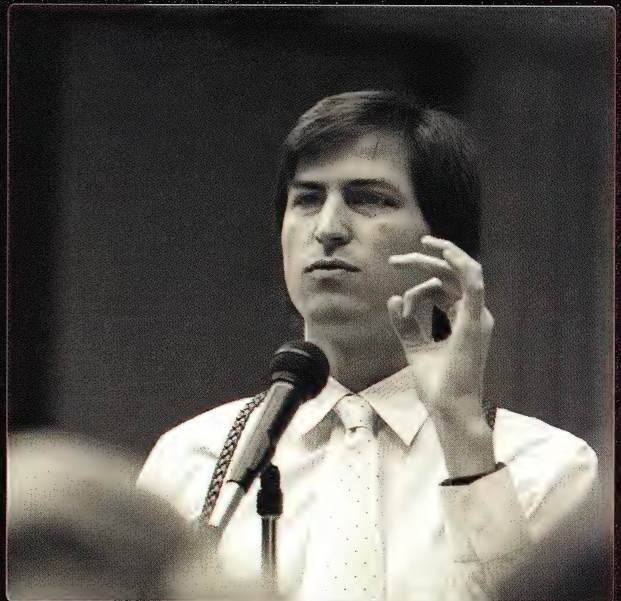
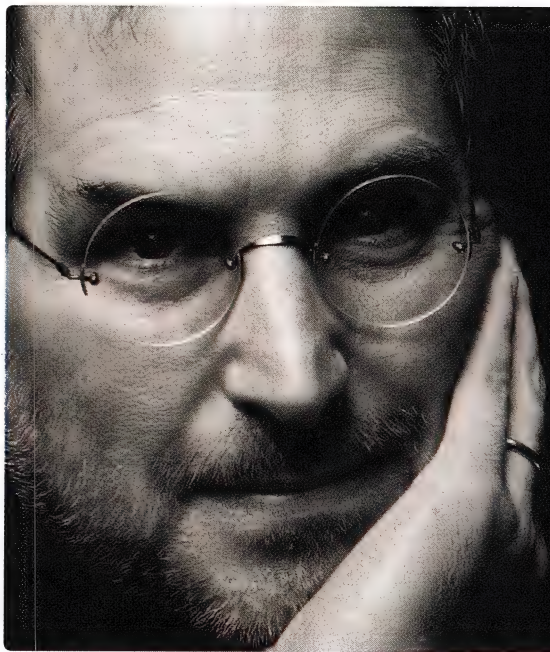


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"This agreement does not involve any licensing arrangements, and the companies are continuing to pursue the existing cases in US courts," Samsung said. Apple confirmed the deal.

Samsung shipped 74.5 million smartphones in the second quarter of the year for a little over 25 percent share of the market, according to research firm Strategy Analytics. Second-placed Apple shipped 35.2 million smartphones in the quarter for a close to 12 percent share, the market research firm added.

Samsung asked the court in California in July to hold invalid claims of two Apple patents in the wake of a US Supreme Court decision in the *Alice* versus *CLS Bank* case that tightened standards for patentability.

The two patents figured in a trial in May at which the jury ordered Samsung to pay Apple about US\$119 million for infringing the iPhone maker's patents. Apple has filed for higher damages for the patents Samsung was found to have infringed and a judgement that Samsung infringed other patents in the case.

In a previous trial, two juries in the same court awarded Apple a total of US\$929 million in damages. Samsung has appealed that verdict.

Attempts by Samsung and Apple to resolve their disputes in the US have not been successful so far. In May, the two

companies told the court in California that they had failed to reach a settlement in their patent dispute, blaming each other for the failure of the talks initiated by the court.

Apple and Google agreed in May to drop all current patent infringement lawsuits between them, but did not agree to cross-license each other's patents. Rockstar Consortium, backed by Apple and others, has, however, sued Google, Samsung, HTC and others in a court in Texas over infringement of Android-related and search patents.

STEVE JOBS WAS 'CENTRAL FIGURE' IN SILICON VALLEY HIRING CASE, JUDGE SAYS

In rejecting a proposed settlement in Silicon Valley's closely watched 'no hire' case, District Judge Lucy Koh said in August that there's strong evidence that Steve Jobs was a central figure, if not 'the' central figure, in the alleged conspiracy to suppress workers' wages.

The case involves allegations that seven of Silicon Valley's biggest companies, including Apple, Google, Intel and Adobe Systems, had secret agreements in place not to poach each others' workers. That

would be a violation of the *Sherman Antitrust Act* and would limit the chance for workers to increase their salaries by switching jobs.

Last year, three of the accused companies – Intuit, Lucasfilm and Pixar – settled the case by paying damages to the affected class of workers. The other four companies fought on, until in April they reached a separate settlement that required Judge Koh's approval.

She refused to approve it, saying the amount was too low. The proposed settlement is for US\$324.5 million, but once the lawyers collect their fees of about US\$81 million, the workers each would get only US\$3750.

What troubled the judge, in large part, was that it's a smaller settlement than the one reached with the other companies last year – even though the evidence presented since then means the workers are in a much stronger position. If the two sides can't reach a settlement that Koh will approve, the case could go to a trial that may reveal even more about hiring practices in the Valley.

Koh recounted that evidence, much of which has already been made public, and concluded there is "substantial and compelling evidence" that Jobs was "a, if not the, central figure in the alleged conspiracy".

Google co-founder Sergey Brin, for instance, has testified: "I think Mr Jobs' view was that people shouldn't piss him off. And I think that things that pissed him off were – would be hiring, you know – whatever."

When Jobs heard Google was trying to recruit employees from Apple's Safari team, Brin testified, the Apple boss threatened him, stating: "If you hire a single one of these people, that means war."

Eric Schmidt, Google's executive chairman, has said Jobs "believed that you should not be hiring each others' ... technical people".

"Steve was unhappy," Schmidt testified, "and Steve's unhappiness absolutely influenced the change we made in recruiting practice."

On one occasion, Koh wrote, Google fired a recruiter for trying to hire a worker from Apple. Schmidt wrote to Jobs and apologised, informing him of the termination, and Jobs forwarded the email to Apple's human resources department, along with just a smiley face.

Other CEOs maintained the no-poaching deal out of "fear of, and deference to, Mr Jobs," Koh wrote. Former Adobe CEO Bruce Chizen, for example, said he worried that Jobs would "deliberately poach Adobe just to prove a point".

The evidence that's been collected related to Google is "equally compelling," Koh wrote. Schmidt, Jobs and Intuit chairman Bill Campbell were "key players in creating and enforcing the anti-solicitation agreements," she wrote in her order.

For example, emails show that Schmidt "terminated at least two recruiters for violations of anti-solicitation agreements, and threatened to terminate more".

There is also compelling evidence against Intel, Koh said, and evidence that Adobe was "aware of the impact of its antisolicitation agreements".

Given the strength of the evidence, Koh apparently thinks the workers' lawyers should push for a bigger settlement or take the case to trial. One expert hired for the case has estimated the workers' compensation should be as high as US\$3 billion, she noted. And that amount could be trebled under the antitrust law if the workers won their case.

She has called a case management conference for 10 September, where she'll meet with the lawyers and decide how to proceed.

JUDGE APPROVES APPLE EBOOKS PRICE-FIXING SETTLEMENT

A US district court judge has given preliminary approval for Apple to pay a US\$450 million settlement for its role in an ebooks price-fixing conspiracy.


Judge Denise Cote of the US District Court for the Southern District of New York in August approved the deal that would have Apple paying US\$400 million to affected ebook buyers and US\$50 million in lawyers' fees in a class-action lawsuit, but

only if Apple's appeal of a 2013 price-fixing ruling by the New York court is rejected.

If the US Court of Appeals for the 2nd Circuit reverses and remands the case back to the district court, the settlement agreement approved by Cote would have Apple pay consumers US\$50 million and lawyers US\$20 million. If the appeals court reverses the 2013 decision by the New York court, Apple would pay no damages.

The proposed settlement is "fair and reasonable," Cote wrote in her order. Lawyers for the plaintiffs in the case "strongly believe" a remand to the district court is unlikely, she noted.

Apple representatives didn't immediately respond to a request for comment on the settlement.

The US Department of Justice, in April 2012, filed an antitrust complaint accusing Apple and five book publishers of fixing the prices of ebooks. Class-action law firm Hagens Berman Sobol Shapiro and several state attorneys general have agreed to US\$166 million in settlements on behalf of consumers from the five publishing companies. 



Kites in the sky

Travelling down the Adelaide River in the Northern Territory on a crocodile tour, Vanessa Faulkner took this beautiful snap.



A group of kites, drawn by the proposition of meaty snacks, joined Vanessa and her husband at the end of a crocodile tour in the Northern Territory and gave her the perfect opportunity to take this month's winning snap.

We asked Vanessa how the chance to take this picture came about.

"At the end of the tour, the guides encouraged a group of kites with meaty snacks," Vanessa says. The birds "lined up behind the boat waiting for the snack to be tossed up and approached one at a time for their treat. I was watching the birds come close to the boat along with everyone else".

"I was amazed at how controlled and precise the birds were. I was surrounded by folks clicking their SLRs trying to get a close-up shot of the kites. I waited for a break in the crowd and I simply stuck my phone out over the side of the boat, took one shot and managed to get this gem.

"I was pretty happy with the result and since then I've been told by a seasoned photographer it was 'a shot in a million'. There was no skill, just pure luck! It was that easy."

A self-proclaimed novice when it comes to photography, Vanessa likes the portability and speed that the iPhone offers.

"Portability and accessibility is the

key. If it hadn't had been for my phone, I never would have got that shot. I don't like carrying around cameras in bags; they are bulky and take too long to get to if you have a quick shot to take."

Vanessa is also a fan of iPhoto, making it her first port of call for editing her photos.

"I have iPhoto on all my devices. It is what I use most and feel comfortable using. It is so versatile," she says.

"I have made several beautifully presented photo books for family and friends – all easily designed and prepared using iPhoto.

"iPhoto is also very kid friendly, which is a bonus for me."

In iSnap we're on the lookout for some of the best photographs being taken with iOS devices. Submit your favourites to macworld@macworld.com.au for your chance to be featured in the online iSnap gallery (www.macworld.com.au/isnap). Each month's winner will win a prize and appear on this page!

This month's prize is a Monopod (\$34.99) and a Shutter Remote (\$54.99) from iStabilizer.

The iStabilizer Monopod is an extendable, handheld mount for smartphones and POV cameras including GoPro, Countour, Drift and light camcorders.

The Shutter Remote offers control over your device via Bluetooth. The remote allows users to capture photos, change music tracks and volume, play and pause movies on an iOS device or Mac, activate Siri and initiate navigation.

www.istabilizer.com





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Road, Preston
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New South Wales

SupaCenta Moore Park

Shop GF25 SupaCenta
Moore Park, 2A Todman
Avenue, NSW
Moore Park, 2021

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mymac





GETTING FIT WITH TECH

There was a time when getting fit meant grabbing a pair of old sneakers, a ragged t-shirt and some shorts. You'd either step out the front door and start jogging, head to the local gym or play a sport at a local club. Today, fitness has become high tech.

We've moved on significantly from the time when a watch linked to a heart rate monitor was the height of technology for most exercisers. There are now hundreds of apps, services and devices that can support your quest to be fitter and stronger.

ANTHONY CARUANA shows you some of the best.

The challenge is finding a balance. You want the tech to support and motivate your exercise regime, but not get in the way of it. The last thing you want is to have to stop what you're doing to press a button or tap an icon.

So, what's out there? The range of products and services is almost limitless. Almost every activity that you can participate in for the sake of your health or fitness can be automatically tracked, recorded and shared – everything from your golf swing via your running speed to your velocity through water.

FITNESS TRACKERS AND SPORTS BANDS

There are literally dozens of different fitness tracking devices on the market now. The majority of these are wristbands that are paired with an app that runs on your iPhone, iPod touch or iPad. In our experience, although it's the hardware that garners the most attention, it's the apps that can really make or break the fitness band experience.



Minimal. Jawbone's UP24 offers a minimalistic design.

Jawbone UP and UP24 \$149 (UP) and \$179 (UP24)

The Jawbone UP and its wireless sibling the UP24 were early entrants to the fitness band market. There's no screen and the only indicators on the bracelet – which comes in three sizes and several colours – are a vibrating alert and a sun and moon to tell you whether the device is in sleep or active mode.

The UP and UP24 are easy to use. Once you're wearing one, the accelerometer counts your steps. Pressing the button on the end of the bracelet once toggles you into sleep mode, so it can track the quality of your sleep based on your movement. While in active mode, pressing the button twice puts the device into sport mode, so it can track you during a run, walk or other exercise session.

The Jawbone app makes it easy to enter meals as well as connect with friends using their own UP or UP24. You can choose how much data to share and there are some options for tracking food intake and activity over long periods of time.

Fitbit Flex \$129.95



Flexible. Fitbit's Flex is a comfortable fitness tracker.

The Fitbit Flex combines a comfortable bracelet with a tracker. It can track activity and you can use the free app to enter meals, workouts and analyse your sleep.

The Flex bracelet has a set of small LEDs that indicate battery life or how far along your daily step target you are. Tapping the Flex in different ways shows different information and toggles the device between activity and sleep mode.

The wristband is soft, flexible and very light. It's barely noticeable and there are no sharp sides or edges that can get caught on clothes.

As well as the Flex, Fitbit has a couple of other trackers and a set of scales called Aria. Its other trackers can be carried in your pocket or on a belt if you aren't a fan of bracelets.

LG Lifeband Touch \$199



OLED. The LG boasts an interactive OLED display.

The sports band/smartwatch market is obviously where many electronics manufacturers believe their next revenue opportunities will come from. LG is

seeking to enter this increasingly crowded market with the Lifeband Touch.

LG has followed the crowd from a design point of view. The bracelet houses an OLED (organic light-emitting diode) touch display that allows you to swipe to access various menu options for notifications from your iPhone (or Android phone if that's your preference), the pedometer or media player controls. Connectivity to your smartphone is via Bluetooth.

There's an LED that changes colour to indicate incoming messages, alerts and other information. Battery life is about two days – that's lower than most similar devices.

Polar Loop **\$139**

Heart rate chest strap sold separately \$99



No worries. Polar's Loop is a waterproof option.

Polar has been one of the most popular sports accessories makers for a number of years. For many athletes, Polar is synonymous with performance monitoring for runners, cyclists and other sports people. The Loop is a sports band that integrates with one of the company's eponymous chest strap heart rate monitors.

The Loop eschews the fancy OLED touch-sensitive display many other sports bands use for a text-based LED screen that shows the number of steps you've taken, heart rate and other measures. It's waterproof, so you can wear it while swimming.

The bracelet comes in a single size that you can cut to fit you perfectly. There's a template in the box and tool so you can adjust the stainless steel clasp and get it right without worrying about making it too small.

Garmin Vivofit

\$159

Heart rate chest strap sold separately \$99

Bundle \$199



Long life. The Garmin Vivofit has a 12-month battery.

Garmin's Vivofit integrates into its online platform so, if you already use a Garmin sports watch, its activity tracker will send its data to the same cloud service.

Where Garmin's Vivofit truly separates itself from the competition is battery life. The Vivofit boasts a 12-month battery. Every year or so, simply swap the small button battery and you're good to go. It's also waterproof to 50 metres, so you never need to remove the Vivofit.

The Vivofit also communicates with your iPhone over Bluetooth and it supports Garmin's heart rate chest straps, so you can wear it while exercising and track your performance. Unlike many other trackers, the display is always on, so you can see how you're going without having to fiddle with buttons.

SPORTS WATCHES AND COMPUTERS

Once you get past the initial stages of exercising and start to establish fitness as a part of your regular routine rather than a chore, it's likely you'll start looking for some accessories. Whether you like running, cycling, golf, sailing or any other activity, it's a fair bet that someone has developed a watch with that activity specifically in mind.

Shopping for a sports watch can be a very difficult and confusing activity. There are literally hundreds of models and dozens of brands to choose from. These come from traditional sports accessory companies, watchmakers and sports equipment makers. Each brings specific expertise to the table and uses that as a selling point.

It's important to know what it is you want to measure. That may sound easy, but there is a huge amount of data you can potentially collect with a watch or, more accurately, a portable wrist computer.

As well as providing instantaneous feedback on your most recent activity, these devices can help look at long-term progress. This can be a great incentive when you feel like you've had a bad session. Looking back can highlight how much you've progressed. Once you've been exercising for a few weeks, it's likely a bad day will be far better than a good day when you started out.

RUNNING WATCHES

If you're looking for a running watch, there are a huge variety to choose from at almost every price point you can imagine. The most basic units will track the time you spend running and make it easy to record splits.

The level up will probably include a GPS (global positioning system) receiver, so they can accurately track the distance you travel and then send that data to a smartphone. Some even include multiple accelerometers that measure your vertical movement while running – an indication of how smoothly you're running.

Although some watches have their own integrated heart rate or pulse measurement device, we've found that a chest strap is more accurate.

Adidas, Nike, Garmin and Polar all make great running watches for every runner from recreational to elite. All of them also have online services, so you can connect the watch to your Mac or iOS device to sync your data. You can then compare yourself to other runners and track your long-term progress.

CYCLING COMPUTERS

Cycling computers come with a dazzling number of options. Again, the best place

to start is with a list of what you need. If all you're tracking is distance, speed and time, then an entry-level unit will probably do the job. However, we'd suggest going a little more upmarket and considering something more advanced that includes an odometer, a speedometer that records your average and maximum speeds as well as a lap timer.

At the high end, cycling computers include GPS receivers and can also record elevation and cadence, and integrate with heart rate monitors.

In some cases, a decent handlebar mount such as those made by Finn or Arkon will suffice when you use an app such as Strava on your iPhone. And, although MapMyRun sounds like purely a running app, it also supports cyclists.

In this category, Garmin and Polar both make popular devices that can securely sit on the handlebars of your bike. But also look out for Suunto and Bryton as they make devices that could also fit the bill.

THE FUTURE

There was a time when if you drew a Venn diagram with one circle for exercise and another for technology that they would hardly intersect. But drawing that circle today has a pair of circles that overlap more and more every day.

We like to keep an eye on emerging trends by keeping an eye on what's coming up on crowd-funding websites such as Kickstarter and Indiegogo. It was at Indiegogo that we discovered the LEO. Unlike many fitness devices, the LEO's sensor is a band worn around the upper leg. According to manufacturers, the LEO will be able to identify different activities based on the way your muscles are working. It will know whether you are running, cycling, walking or jumping.

As well as measuring your pulse, like many other devices, the LEO will also measure your hydration level, lactic acid build-up in your muscles and other signs of fatigue. All the data will be sent directly to an iOS app – in real time if you carry your phone, so you can get instant feedback



Upstanding. The Varidesk sits on top of your current desk.

on whether you're exceeding your physiological capacity.

The LEO is still at the funding stage at the time of writing, but the manufacturer exceeded its initial funding target quickly, so it looks like the anticipated delivery date of April 2015 is pretty safe.

WALKING AND STANDING DESKS

Your office no longer needs to be a place where you spend the day with your bottom nestled in a comfortable chair all day. The World Health Organisation has identified physical inactivity as the fourth biggest killer on the planet – ahead of obesity. Some health researchers are even declaring prolonged periods of sitting as being as damaging to your health as smoking. Fortunately, there are some options.

Standing desks are becoming increasingly popular. The concept is simple: once you're standing you're engaging more muscles. And it's not just your legs. The core muscles in your abdomen are also working and your posture will improve, assuming your desk is at a height that prevents you from slouching.

If scrapping your desk and replacing it with a standing desk isn't possible, then something like the Varidesk may work for you. This is a device that sits on your regular workspace. However, it can be adjusted so that you can shift

between sitting and standing. There are several versions of varying sizes that can accommodate dual screens and include keyboard shelves and other extras.

If you're prepared to take the plunge and replace your desk with a standing model, there are plenty to choose from. Or you could make your own by putting a smaller table on your existing desk. Ikea's inexpensive Lack table is a great option for this.

If you want to try something more active, then perhaps a walking desk may suit. Walking desks combine a slow moving treadmill with a desk so that you are in constant, slow motion while you're working.

With the walking desk, you're not moving fast, just three kilometres per hour or so. But if you spend eight hours at work at your desk you'll cover 18 kilometres – that's a good day's exercise. Of course, you'll want to ensure you dress appropriately and keep the deodorant close for the benefit of your colleagues.

SCALES, BLOOD PRESSURE AND OTHER MEASUREMENT TOOLS

Monitoring your health and fitness isn't just about tracking steps, distances, weight and food intake. There are so many more metrics you can easily measure and track.

For example, body composition – usually measured as a percentage of body fat within your body – is a valuable measure and arguably more important than weight.

It's important to remember that there's little reason to get too concerned about one measurement. For example, many people launch into exercise programs with a weight loss goal. However, if part of your exercise program involves lifting weights, then your body composition will change. You'll likely lose some fat, as long as your diet is sound, but the amount of muscle you're carrying will increase. As muscle is heavier than fat, it's possible that your weight will stay the same or even increase.

It's important to note that the devices we've looked at aren't replacements for sound medical advice. They're intended to support your health program.

The Withings Wireless Body Analyser and Digital Scale (\$220 through the Apple Store) can measure your weight, heart rate and body composition. Once it collects the data, it can send it all to an app on your iOS device either by Bluetooth or Wi-Fi, so you can see your current readings and track long-term trends.

Withings also makes the Pulse Heart Rate and Activity Tracker. Weighing just 8g, it's designed to be worn on your belt. It can track your activity throughout the day and you can use it to check your heart rate. There's a wristband, so you can wear it at night to track your sleeping patterns. All the data it collects can be synced to an iOS app and Withings integrates with over 100 partner apps, so you can also track food intake and other important data.



Monitor. The Withings Wireless Body Analyser and Digital Scale can measure your weight, heart rate and body composition.

If you're already using a Fitbit fitness band, you can accessorise with the Aria Scale (\$170 from the Apple Store), which integrates with the Fitbit iOS app. The scale measures weight, body fat percentage and BMI, and sends the data to your iOS device via Wi-Fi.

Blood pressure measurement used to be too complex to measure, requiring a special cuff and a stethoscope. However, iHealth has developed the Wireless Blood Pressure Wrist Monitor (\$80 from ihealthlabs.com). This cuff is worn around the wrist and controlled via an iOS app that guides you through the process. You can use the app to track long-term trends and share the information with your health professional.

FITNESS GAMIFICATION

One of the big trends in IT has been gamification. This is where the sorts of things game designers use, such as points for achieving certain outcomes, are applied in work-related activities.

Gamification can work really well as an incentive to motivate people to exercise more regularly.

A great example is the way gamification has been applied to running. One of the most popular programs for getting people running when they have had little incentive to do so is the popular Couch to 5k program, often called C25K. Although there are dozens of C25K apps in the App Store, they all work along the same principle.

FROM THE COUCH TO ZOMBIES

C25K starts by getting you to set aside 30 minutes. You then spend a short time jogging and alternating with short periods of walking. Over 30 sessions – three per week for 10 weeks – the amount of run time increases slowly and the walking decreases until you're running for 30 minutes. The apps use music to keep you distracted during the run phases.

And, if you're a sceptic about C25K – we did it last year and it works.



Zombies, Run! for iOS and Android tasks runners to keep pace ahead of the hoard.

However, there are a number of variations – our favourites are those that riff with the recent fascination some people have with zombies. Rather than running to music, the apps tell you that you're being chased by zombies. When you hit the end of the run time, you'll have outpaced the zombies by far enough to have earned your walk break.

JOIN THE FITOCRACY

Fitocracy combines elements of social networking and gamification to exercise. Fitocracy has an iOS app that can be used for interacting through a Facebook-like interface with other Fitocrats, or Fitos. But it also has an extensive exercise library, so you can enter your workouts.

The gamification angle comes in when you complete a workout. Fitocracy assigns points to your workout based on the intensity of your activity and the types of exercise you perform. As you accumulate points, you level up.

It's worth noting that some exercises can earn more points than others, so you may be surprised or even disappointed after some workouts. For example, a really hard 10km run will generally earn fewer points than a medium intensity weights session. Free-weight movements such as squats and deadlifts will earn more points than machine-based exercises such as the leg press, even if you leg press more weight.

As well as working out solo, members who pay an annual subscription of US\$40 to become Fitocracy Heroes can engage in quests and challenges where they compete either against a group or one-on-one with other members.

If you're new to exercise, there's no shortage of Fitos who will provide advice and encouragement. And for experienced exercisers, the levelling up can be a great incentive to work a little harder. 🐼



MAC GEMS

NEW SOFTWARE FROM THE MAC APP STORE

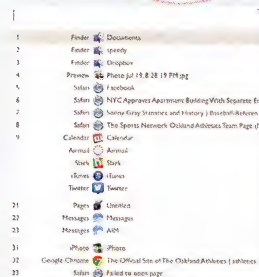


CONTEXTS PRODUCTIVITY

Contexts
\$10

TOP
PICK

Contexts supplements – and can even replace – OS X's window management tools, and it does so in a way that is legitimately useful, especially if you rely on keyboard shortcuts to navigate your Mac. Want to find a Finder window in a hurry? Press Command-Space to get a Spotlight-like open-window picker, start typing the window's name, and watch as Contexts narrows the list down to the window you want. It's quick and it works well, but Contexts doesn't include browser tabs in the list. If you're looking for a webpage opened in a background tab, you'll still have to hunt for it. Contexts also assigns a number to each open window, so you can pull them up readily with a keystroke. Available via contexts.co.



PLAY+ FOR YOUTUBE ENTERTAINMENT

"It's About Time Products"
\$6.49



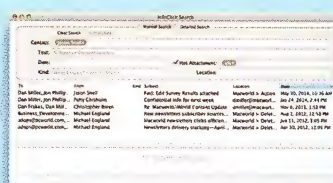
For those who watch online videos incessantly, Play+ features easier navigation and multitasking options compared to watching clips on your Mac. You are given the ability to watch videos while also searching for

more below. Play+ can be a little too streamlined in places and would be significantly better with more customisation options, but is a decent alternative for watching clips if you're a casual browser.



NISUS INFOCLICK PRODUCTIVITY

Nisus
US\$15



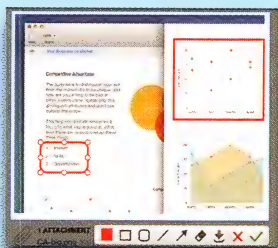
If you're a dumper emailer who just keeps everything in one vast inbox and relies on search to find your messages, Nisus InfoClick definitely has something

to offer. Essentially a supercharged search tool for Mail, InfoClick offers more power than Spotlight or your Mail's own built-in search tools. Although it could be simpler to use, InfoClick could make your life a lot easier. Available via nisus.com.



POWERSHOT UTILITIES

Apollo
\$1.29



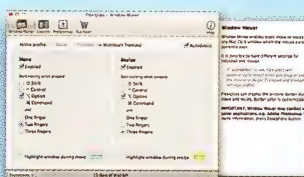
As robust as the screen capture features in OS X are, there's always room for improvement. Powershot fills this role nicely, offering a lightweight, efficient utility that allows you to configure keystrokes for taking screenshots, target the areas of the screen that will be used

in the screenshot, lets you specify what will be done with the image file, and allows annotations to be added to the finished product.



FLEXIGLASS UTILITIES

Nulana
\$12.99



If you're interested in simpler window movement, Flexiglass is an intriguing implementation of the Mac's accessibility features. The app features complete and convenient

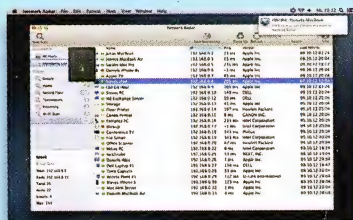
window management with exclusive multi-touch gestures support, offering a simple way to manage many windows on a Mac with a mouse, keyboard, trackpad and graphics tablet. It includes different tools to move, resize and arrange windows on the screen easily and joyfully.



NETWORK RADAR UTILITIES

Daniel Diener

\$24.99



If you need to go above and beyond Apple's Network Utility, Daniel Diener's Network Radar is a powerful step up. Network Radar certainly isn't a tool that the average user will need, but it can definitely

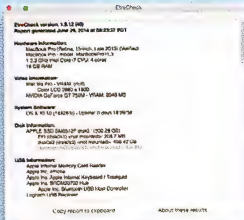
be helpful for the budding network administrator in us, and for those who find themselves troubleshooting network activity.



ETRECHECK UTILITIES

Etresoft

FREE



EtreCheck offers a barebones interface that is unlikely to win any design awards, but it produces a clear report that contains practically every last bit of data you are likely to need to identify a computer problem. EtreCheck quickly gathers information that would normally require poking around a dozen or so

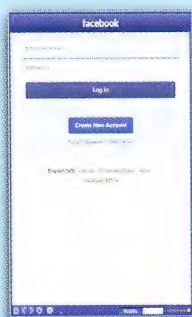
sources on a Mac, allowing you to focus on a solution to anything from hardware faults to misbehaving software. Available via www.etresoft.com.



HEAD FOR FACEBOOK SOCIAL NETWORKING

SquidMelon

\$1.29



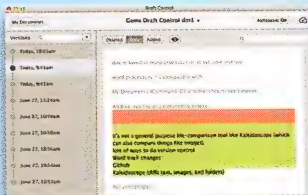
Head For Facebook is a tiny little circle that lives on a corner of your screen and, when clicked, reveals the Facebook.com website in a web view (mobile or desktop), blurring out the rest of your desktop. Another click, and the website disappears. Given that Facebook has no desktop client, Head is a nice way to separate your social media interactions from your day-to-day Safari or Chrome use.



DRAFT CONTROL PRODUCTIVITY

Draft Control

FREE



Draft Control is dead-simple to use: You add the document you want to track to Draft Control's My Documents list. Thereafter, any time you save the document, Draft Control will take a snapshot of that version; in its preview window, it colour-codes all additions to and deletions from the previous version. Should you ever want to roll back to one of those previous versions, you can.

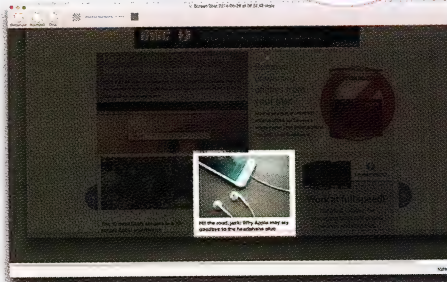


LIGHT UP GRAPHICS & DESIGN

re:stacks

\$3.79

Need help drawing attention to a small detail in a picture? Light Up solves this problem by allowing you to load up an image from a file and blocking it out with a mask whose darkness you can customise to your heart's content. You can then selectively 'carve' sections out of the mask, allowing specific portions of the underlying image to be highlighted. The carving tool supports three different shapes: rectangles, rounded rects and ovals; you can have as many as you like in your image, and are free to resize and move them around. The app is incredibly simple to use and supports several common image formats like PNG and JPEG. It does not, unfortunately, support Photoshop files.





WHY OS X YOSEMITE WILL BOOST YOUR BUSINESS PRODUCTIVITY

BY ANTHONY CARUANA

It won't be long until Apple makes OS X Yosemite – the latest version of Mac OS – available to all of the Mac faithful. That may mean staff suddenly start appearing at the office with upgraded MacBook Airs and MacBook Pros – a potential issue if you run a BYOD (bring your own device) program. But should you upgrade? What's in it for your business?

FILE SHARING

If you've been a Mac user for a few years, then you probably remember Apple's iDisk, which was part of its iTools offering. We have to admit, we used it back then and it was poor – at least in this part of the world.

Back then, internet links were much slower than today and that made the service very annoying to use. But, today, we have access to dozens of public and private cloud storage options. Among the most popular are Dropbox, OneDrive and Google Drive.

Until OS X Yosemite, iCloud only allowed you to sync particular types of files across devices. But with Yosemite we get iCloud Drive. This allows you to sync any file between your Macs and iOS devices – assuming your iPhones and iPads are running iOS 8 when it's released later this year.

In addition, AirDrop has been given a much needed boost. It now supports the ability to share files across Macs and iOS devices even if they're not on the same network. That can be handy for ad hoc file sharing.

Are these important features for business? Neither of them is going to make a compelling case, on their own, for upgrading. But they are useful additions. In particular, if Apple gets iCloud Drive right, then being able to ditch third-party file storage services may make life a little easier for IT administrators as there's one less username and password to manage.

Mail Drop also looks like a significant benefit. Often, we need to send large files to clients and colleagues, but some mail gateways restrict the size of files being sent. Mail Drop works in a similar way to services like WeTransfer (formerly known as YouSendIt). Large attachments are uploaded to your iCloud Drive and a link is placed in the email so the recipient can download the file rather than receive it through email.

File-sharing services already offer this, but the key is Apple's ability to seamlessly integrate the function into its apps without the need to carry out any manual steps or accessing third-party services.

CHANGES TO THE USER INTERFACE

The last few releases of OS X signalled a shift. In the past, a new OS would be released every three years or so and there would be a massive slew of changes. Over the last three releases, Apple has released updates to OS X annually with fewer changes between each iteration.

In some ways, Yosemite feels like a step back. For example, the Dock is again flat and two-dimensional.

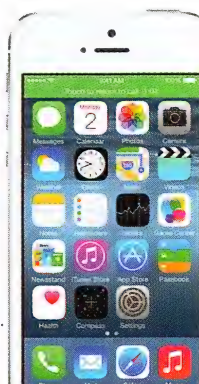
After a few weeks of using various pre-release versions, we've stopped noticing the translucent menu bars. Frankly, we'd prefer them to be solid, but they don't make any real difference to usability in our view.

The spotlight buttons in the top-left corner of most windows have been repurposed. While the red and amber retain their close and minimise functions respectively, the green is now a toggle to full-screen mode. This makes sense and means that the button now behaves consistently between applications – something many Mac users, new and old, found very annoying.

Spotlight has been changed. When you launch it from the magnifying glass icon, the search window pops up in the middle of your screen now. The new window is larger and shows more information, but it's annoying that the window is nowhere near its launch point. We preferred the old way for Spotlight. That said, we tend to use the Command-Spacebar shortcut for launching Spotlight rather than the icon so, again, it's not a deal breaker.

iOS INTEGRATION

This is perhaps the most significant change for many users. If your staff are using iPhones and iPads, then they're likely to be



interested in some of the iOS integration. This is all pulled together under a set of services Apple calls Continuity.

For phone calls, you'll be able to use your Mac as a speakerphone. Calls can be made and received from your Mac.

Messages gets integration with SMS as well as iMessage. We really like the ability to send and receive all our messages while working on our Macs. Although it can be a distraction, being able to deal with all messages without having to switch devices is very handy.

If you move between your Mac and iOS devices, then Handover means you can seamlessly do so. If you're reading a webpage, you'll be able to continue on your other devices, right from the same spot. The same goes with composing emails.

WILL THE TRANSITION BE PAINFUL?

Like any operating system upgrade there are some gotchas. Test all of your critical applications. With the beta, we've seen reports of some applications not working – which is to be expected at this stage. But even when the final release arrives later this year, there may be some lag between the release and applications being updated.

There are user interface changes, but we haven't hit any that have left us scratching our heads with total confusion. There's little chance this will be as jarring as the changes Windows users suffered when Windows 8 was unleashed.

With the new features, none are complex to use. If you plan to shift to iCloud Drive from another file-syncing

service, then there will be the pain of copying files to the new service and then allowing the sync process to run its course.

Handover and Continuity are useful and easy to use. Although they're new, we wouldn't expect a huge amount of training, if any, will be needed. Our observation is that users familiar with iOS will start experimenting and figure it out for themselves quickly.



TEXTING APPS FOR BUSINESS USERS

BY LIANE CASSAVOY

Texting used to be nothing more than a form of entertainment for teens and young adults who wanted to stay in touch – constantly – with their friends. But these days, texting is a business tool, and a serious one at that. Businesses are using texting as a means of inter-office communication and as a way to reach out to business contacts and even customers.

And while your smartphone comes with its own, perfectly serviceable texting app, if you're relying on that alone to fill your texting needs, you might be missing out. A third-party texting app can offer more features and an improved design and save you money as it won't rely on your monthly messaging plan. Here are four apps for business users to consider.



WHATSAPP

Free for one year, US\$0.99 after

Any roundup of text messaging apps has to include a mention of WhatsApp, which was purchased by Facebook earlier this year. That move thrust this already incredibly popular app directly into the tech world's limelight. And for good reason: WhatsApp is reasonably priced (free for the first year; 99 cents per year after that), works on a variety of platforms (Android, BlackBerry, iOS, Symbian and Windows Phone), and sports a clean, easy-to-use design.

It also features a massive user base – more than 500 million people – which is important since you can only connect with other WhatsApp users. I was pleasantly surprised to see several of my contacts on there when I loaded the app. WhatsApp lets you send photos and videos, share your location and create group chats.

The downsides of WhatsApp? It's widely regarded as a consumer app, so your business partners may balk at installing it, and it lacks a desktop component or a tablet version, which many of its rivals offer.



WICKR

Free

Cue the *Mission: Impossible* theme song. Wickr, a free app for Android and iOS, is something straight out of spy fantasies. It's capable of delivering what it says are 'top secret' messages to fellow Wickr users – ones that disappear after a select interval.

You can send text, photos or videos to a single user or a group and, if one of the users is not on Wickr, they will receive an invitation to join the service. You also set an expiration point for the message, anywhere from three seconds to six days. Wickr says all messages are 'forensically wiped' after they expire and that the service users peer-to-peer encryption to protect all of the data it transmits.

It also allows you to delete location data and claims to never store your messages or user information on the company's servers. Some of its features, such as the ability to add graffiti to your messages, are a little lighthearted for business use, but overall Wickr has the potential to be a solid professional tool.



VIBER Free

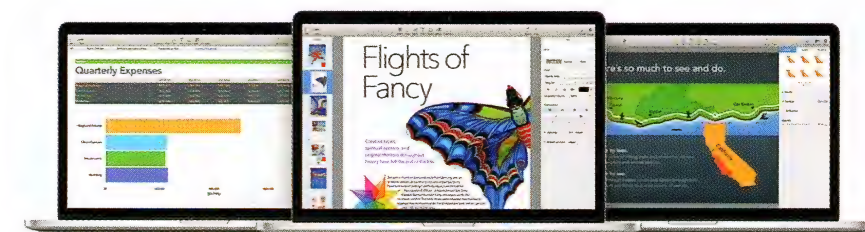
In some respects, it's almost unfair to call Viber a texting app because, really, it does a lot more than that. This free app works with Android, Bada, BlackBerry, iOS, Nokia and Windows Phones, as well as on Windows, Linux and Mac desktops. It lets you connect to other Viber users for free via voice, video or text messaging and make voice calls to non-users when you buy Viber Out credits.

Some of its texting features will turn off business users, especially its animated backgrounds and emoticons. But I like its ability to bring your text messages to your desktop computer, even in the middle of a chat session.



TEXT ME Free

Despite its name, Text Me offers more than just texting. This free app lets you make voice and video calls, too. It works with Android, iOS and Windows Phones and lets you send messages to and from folks who aren't using the app on their end – a nice plus if you don't want to convince your friends and colleagues to download an app.



The downside is that Text Me requires you to sign up for a new number, likely to be a big issue for business folks who have already shared contact info with co-workers and clients. You'll also need to purchase Text Me credits if you'd like to send international SMS or make calls to non-Text Me users.

FREE BUSINESS APPS FOR THE MAC

BY ANTHONY CARUANA

We all know that there's no such thing as a free lunch. But it is possible to get business apps, legally for no cost. This is due to lots of different applications that are available through the open source community and from large vendors that have released some applications at no cost.

However, it's important to note that free software usually also means you don't have access to the same level of support as commercial applications. However, that doesn't mean you're completely out on your own. Many open source applications have vibrant user communities that support each other.

If you're looking at open source or free applications for your business, take time to:

- Evaluate a few alternatives for the type of application you want. For example, there are several free or low cost office suites. Try a couple and look at user forums to gauge whether there's a supportive community that will help if you hit some difficulty.
- Make sure critical business documents open correctly. If you've been using a commercial application and are moving to an alternative, make sure they open correctly. Just because a file has the

.docx extension doesn't mean it will be 100 percent perfect when opened in a different application.

- Train your staff. While different applications may deliver the same functionality, they may do it in different ways. If your staff are accustomed to using Microsoft Word and you move to Open Office, it's likely they'll need some time to find where the commands they use are located in menus.

OFFICE APPS

For the last 20 years or so, Microsoft Office has been the lingua franca for spreadsheets, documents and presentations. But it is not the only game in town.

A few years ago, the .docx, .xlsx and .pptx document formats became official ISO standards that can be used by any software developer. That meant creating documents could be opened regardless of who developed the applications. The reality is that the standard defined minimum requirements and developers could create their own extra features. For example, Microsoft allows Word documents to contain tables that are embedded in other tables. But other applications that can open these documents aren't able to render the embedded tables correctly.

If you're looking for an alternative to Microsoft Office, then the main contenders are Open Office, Libre Office and Apple's iWork.

iWork is free for anyone who bought a Mac or iOS device from September or October onwards last year respectively. While iWork's three applications – Pages, Numbers and Keynote – don't boast feature lists as long as the other programs in this category, they do offer more than enough functionality for most users and are elegant and simple to use.



FileMaker
An Apple Subsidiary

PROUDLY SUPPORTING MAC IN BUSINESS

Accounts - multi-company & currency, parent child, multi address, integrated google maps, CRM - **Payroll** - payrun, superannuation, superannuation adjustment, next of kin, company, department, class, multi-award, RDO, cost splitting by department, multiple bank accounts, leave loading, allowances, child support, leave loading, rebates, salary packaging, commission structures, salary sacrifice, workers compensations, unlimited super funds per employee, annual leave, long service leave, carer & personal leave, future leave, accumulators, employee log file, Statement of Leave, payrun log, service, loan, reversals, capital allowance schedule - **Job Projects** - resources, activities, time sheets, allocations, job project invoices, job project credit memos, details, cost, analysis, job project financials, planning and quoting, billing, GL budget, resource & project gantt charts, tracking notes - **Inventory** - manufacturing, bill of materials (BOM), size/colour style matrix, unlimited barcodes per product, formula pricing, hire, lay by, multi-shop, batch and serial number tracking, inward goods, arrivals & deliveries, resources, price-book, multiple locations, multi-department, open to buy forecasting integrated emailing, document management, integrated soft phone. Sales reps, quotes, orders, invoices, requisitions, purchase orders and purchases, delivery run maintenance, dashboards, show reports, stocktake entry, transfer entry, build entry, unit demand, manifest, manager, asset purchase - **Management** - statement of position, months activities, cash & account movements, tax calculation, auditing tools, FX currency settings - **Assets** - passwords, password management, location management, tax and company depreciation, serial number tracking, warrantee storage, insurance details, barcode, company and tax valuation, computer equipment details, disposal, purchase, revaluation, repair, service, loan, reversals, capital allowance schedule - **Utilities** - User access inquiry, system controls, master defaults, remote access defaults, co inquiry, department inquiry, task inquiry, organisation chart, work flow rules inquiry change menus and names, server administration, web server - **Workbook** - CRM, contact management, documents, tracking notes - **System wide** - document management, CRM, email, printer, processor spreadsheet, wysiwyg report writers, SQL database, backup, restore, upgrade, patch, query editor

www.sapphireone.com



Open Office (www.openoffice.org) is probably the best known alternative to Microsoft Office. It's widely used, regularly updated and has a vibrant user community for support and advice.

Another mature and well-supported alternative is Libre Office (www.libreoffice.org). Now in its 12th year of development, Libre Office is used across the world.

GRAPHICS

One of the more expensive business apps that many companies spend money on is Adobe Photoshop (www.adobe.com/au). It is the de facto standard for image manipulation. The thing is – not everyone needs all of the features offered by Photoshop. For some

users, a simpler version may suffice.

We'd suggest taking a look at GIMP (www.gimp.org) – the GNU Image Manipulation Program. The interface looks a little dated, but it can open Photoshop images and edit them with many of the same options and effects as Photoshop.

If a more modern interface is important for you, then Gimpshop (www.gimpshop.com) is another alternative. Again, it offers the most used features in Photoshop.

DON'T FORGET THE APP STORE

One of the handier features in Apple's App Store for the Mac is the Top Free Apps list. However, you may have missed that if you open the Business category, you can get a top free apps list for that category.

That's a great way of tracking down free apps and you get the added benefit that any updates will be delivered through the mechanisms built into your Mac by Apple.

A quick scan of the list at the time of writing revealed apps for invoicing, VPN connections, CRM and online faxing just to name a few.



SEARCHING FOR DATES IN FILEMAKER PRO

BY DAVID HEAD

One of the most common functions in a FileMaker solution is to find records. Often you may be searching for records that fall in a particular range of dates. FileMaker Pro provides a range of useful techniques to quickly find the records you need.

To find records in FileMaker Pro, you use Find mode to enter a find request. Enter Find mode by selecting it from the View menu (or by using the keyboard shortcut, $\text{⌘}/\text{Ctrl-F}$). If you simply enter a date into the required date field, then click the Perform Find button, FileMaker Pro will find all records that exactly match that date.

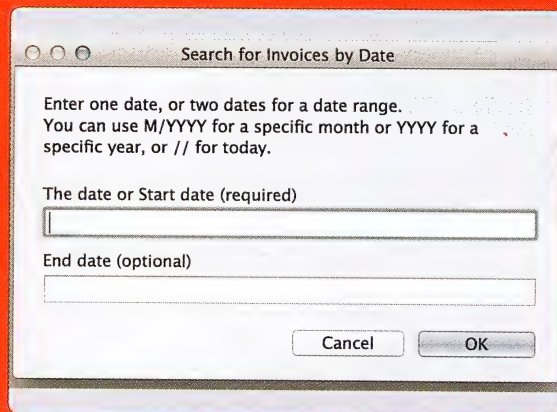
To find records that match a date range, enter the start date and end date separated by an ellipsis (...). So if you enter 1/1/2014...31/3/2014, you will find all

records from January, February and March in 2014. Curiously, if you enter just two periods, that will also work!

You can also use operators such as <, >, ≤ and ≥. To make the last two easier, you can also enter ≤ or ≥ (write them in the order you say them – less than or equal to, greater than or equal to). An example is ≥26/1/2014, which will find all records with a date on or after 26 January 2014.

There are some useful shortcuts available when finding dates. One is to match records from today's date – use //. This may be used to find all invoices from today. Another shortcut will find all records

from a specific month and year – by entering 3/2013, this will find all records from March 2013. And finally, if you enter just the four digit year, FileMaker Pro will find all records from any date in that year.



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Macworld
AUSTRALIA

MAC IN BUSINESS LAUNCHES

The new home for business-minded Apple users on macworld.com.au

While many Mac, iPhone and iPad owners use their devices for purely personal pursuits, there are those who document, record and share as part of their day to day work. What are the most efficient and effective hardware and software options for your needs? How can you start using it immediately to drive sales, connect with colleagues, create powerful presentations, reduce communication charges?

We examine the latest technology for enterprise users to help you make the best use of your time and resources for your business.

Jonathan Stewart - Editor of Macworld Australia

We started this section as we appreciate that technology is a critical foundation for the success of your business.



macworld.com.au



APP GUIDE

Cool software for the iPad, iPhone & iPod touch.



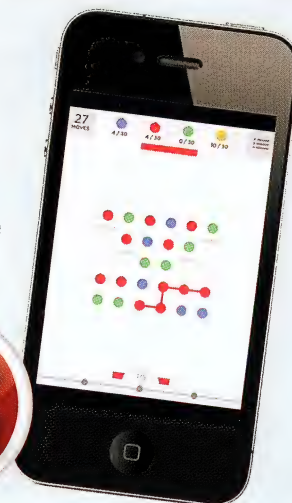
TWODOTS

GAMES

Betaworks One

IPHONE & IPAD FREE

Produced by Betaworks One, the aim of the game is to produce as many vertical and horizontal lines from the same coloured dots as possible. Although connecting dots may not be the most thrilling of concepts, the introduction of levels with increasing difficulty adds a level of addictiveness the original *Dots* can't match. Each player is assigned five lives, which if lost are replaced every 20 minutes or can be bought for more impatient players. Lives are lost if the player fails to compete the level in the assigned number of moves or restarts the level from the beginning. With its simple, minimalistic design, *TwoDots* is engaging enough to provide even the most skilled puzzlers a lengthy gameplay.

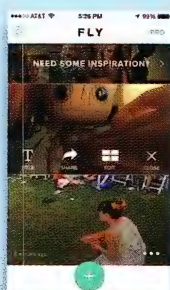


FLY

PHOTO & VIDEO

Fly Labs

IPHONE FREE



The thought process behind Fly is simple: record up to four videos (either in the app or elsewhere), then bring them into the Fly timeline and use the app's innovative multi-touch gestures to quickly sew together a fun little video. The emphasis here is on short (under five minutes), visual, musical videos; there's no way to fiddle with adding text or time transitions. It's a delightful little app.



STEAMPUNK TOWER

GAMES

Chillingo

IPHONE & IPAD FREE



Steampunk Tower is the quintessential tower defence game – and by that, I mean it's a game in which you are asked to defend a tower. If you're a fan of the science-fiction subgenre that coined the term 'steampunk' you'll love this highly stylised, customisable game. Boasting great-looking high-res graphics and a spunky, jazzy soundtrack, everything about *Steampunk Tower* will transport you into an attractive, alternative world.

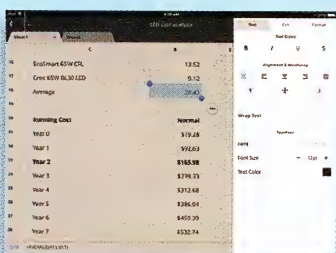


PERMANENT 2

BUSINESS

Permanent Co.

IPAD FREE



Easy to use and feature rich, Permanent 2 has evolved into a nice, straightforward spreadsheet app for iPad. With Box, Google Drive and Evernote cloud storage in the free version, it's easy to keep your work accessible from anywhere. But if you want

full Excel compatibility, you'll need to pay \$12.99 for the Pro version.

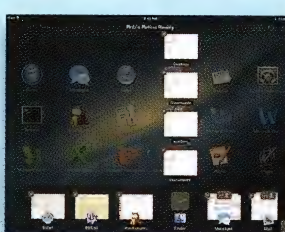


PARALLELS ACCESS 2

BUSINESS

Parallels

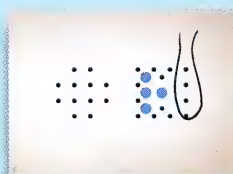
IPHONE & IPAD FREE



Parallels Access 2.0 is a unique, well-thought out remote-access app that lets you view and control your Mac or Windows machine from any iOS device. You can connect either over a local network or over the internet. The app is easy to use featuring both the traditional 'show me my Mac' view and an application-centric view. The app requires a subscription to access up to five computers.



**BLEK
GAMES**
kunabi brother
iPHONE & iPAD \$3.79

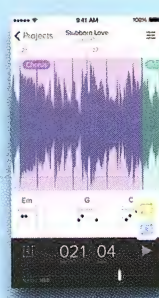


Blek is incredibly simple and approachable, yet a deviously (and enticingly) challenging game. You are tasked with clearing all of the coloured dots from each screen by drawing a single doodle – which then becomes

animated based on your input and continues moving along the screen. There's a definite challenge packed in and it doesn't take long before you're fixating on a single puzzle for a long stretch of time.



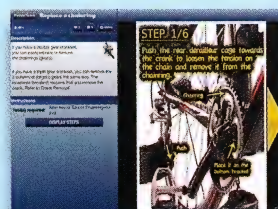
**CAPO TOUCH
MUSIC**
SuperMegaUltraGroovy
iPHONE & iPAD \$6.99



Capo is a great tool to help guitarists learn new songs. The app has a wide range of touch features to slow down or speed up music, raise or lower the key, and loop regions that can help musicians at all skill levels learn and practise new songs. Featuring the ability to sync your files with iCloud, Capo is a great, easy to use companion if you're a keen guitarist.



**BIKE REPAIR
SPORTS**
Atomic Softwares
iPHONE & iPAD \$4.99

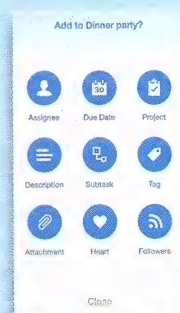


Atomic Software's Bike Repair offers 58 repair guides, and 95 'tips and tricks' for fixing problems, keeping your bike in top riding shape, and even helping you avoid common injuries that stem from poor bike fit. Browse bike components, and

the app shows common repairs and maintenance for each component. Choose a repair or maintenance task, and Bike Repair shows you detailed information and an illustrated guide.



**ASANA
PRODUCTIVITY**
Asana
iPHONE & iPAD FREE



Asana's iOS app capably serves iPhone and iPad users of the web-based task management services with most of the features of the desktop browser version. You can use Asana for all sorts of undertakings, from planning a sales campaign to a family outing, and the iOS app extends its usefulness to a whole universe of users who prefer to manage their business and professional lives on an iPhone or iPad.



**GOODREADER 4
PRODUCTIVITY**
Good.iWare
iPHONE & iPAD \$7.49

GoodReader 4 is a universal app, and provides robust PDF editing tools across devices. You can read, edit and create new files and do so much more with this slick upgrade to a longtime favourite. GoodReader 4 builds on the earlier versions' already excellent file and folder management tools. Users can import PDF files from Mobile Safari using the 'Open In...' extension (known technically as iOS' inter-app Document Interchange), and you can also import web pages and PDFs using GoodReader 4's built-in (but bare-bones) browser. That said, the app works most smoothly when used in conjunction with Dropbox, Google Drive, Box, iCloud and other cloud storage services. You can set up GoodReader to download, upload and automatically sync files and folders to these services.



A tale of two Apples

How Apple follows Steve Jobs' lead by not following it.

Tim Cook's instruction from Steve Jobs was clear: Don't let Apple become paralysed like Disney did in the wake of Walt Disney's death, endlessly asking how the esteemed founder would react in any given situation. The only directive from Jobs' tenure that mattered after his death was the one that freed Cook and everyone else at Apple from playing 'What Would Steve Do?'

Criticism of post-Jobs Apple tends to run in one of two directions: Either Apple is doomed because it's slavishly following the old playbook of its former CEO, or it's doomed because it isn't following the playbook of its genius former CEO.

As a close observer of Apple before, during and after Jobs' tenure, I can tell you that the Apple of today is not playing by the Steve Jobs playbook – except for the bit that demanded that everyone stop asking what Steve would do. Tim Cook and his lieutenants are immersed in the Apple culture that Steve Jobs created, of course, but they're applying the culture to an ever-changing world.

WE GOT THE BEATS

Take Apple's US\$3 billion acquisition of Beats. Apple bought plenty of companies during Jobs' run, but most of them were below-the-waterline businesses that Apple broke up for their component parts, integrating their employees into the Apple workforce. Beats, in contrast, is an existing name that will presumably continue – forcing Apple to steward another customer-facing brand for the first time in recent memory.

Jobs was famously disdainful of the concept of music subscription services. Were he alive today, even he might change his mind on that point, but since he's not here, it's up to Cook, Eddy Cue, Phil Schiller and the rest of Apple's brain trust to make such calls. Beats Music, though new and small, is an excellent service with smart curation features. It gets Apple in the game.

Then there's Beats Electronics. We can debate the quality of its headphones, but they are successful and cool. By buying Beats, not only does Apple get to influence the future of a popular product (and ensure that it works best with Apple's latest stuff), but the company also keeps its competitors' grubby mitts off it.


And then there's this year's Worldwide Developers Conference, in which all sorts of rules changed. Apple dropped the cloak of secrecy, with developers free to speak about what they learned and with members of the press invited to attend and to write about what they saw. With iOS 8, developers are getting access to corners of the operating system that they've been clamouring for. Apps can share files, display widgets in Notification Center, and even run small portions of themselves inside other apps.

On the Mac side, OS X Yosemite will benefit from iCloud Drive, which gives users free access to the iCloud file structure. Consider, too, the connectivity features, including Handoff, which allows Macs and iOS devices to pass information back and forth much more easily. That seems like a major course change.



COOK IN CHARGE

Those developments are just the latest indicators that this is not Steve's Apple, but rather the post-Steve Apple. I might even argue that Apple executives have been able to unmake some decisions that Jobs – perhaps unwisely – insisted on. For starters, the 'thermonuclear' patent war that Jobs started with Google may be abating, since the results of the trials have consisted of embarrassing disclosures, huge legal fees and mild slaps on the wrist for the infringers.

I believe that if Apple stuck by the old 'What Would Steve Do?' playbook, the company truly would be doomed, looking backward and second-guessing key decisions based on strategies that are increasingly out-of-date. Instead, Apple executives are making interesting and risky decisions. Whether the Beats acquisition ultimately succeeds or fails, and whatever the impact of the changes unveiled at WWDC, the fact that these things happened at all is a good sign for Apple's future. 



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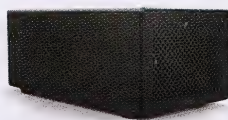


OWC Mercury Elite Pro Dual

Dual Bay Thunderbolt + USB 3.0 Drive

The perfect solution for any backup, audio/video, photography, or data management needs.

Up to 10TB from \$257.50



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Utilize up to two PCIe cards. Perfect for A/V editing, networking, storage, and more.

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0.5 – 30 Meter Lengths Available

Durable, high-quality, long-lasting, Thunderbolt cables.

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The Qx2 features four 3.5" hard drives in a brushed aluminum enclosure with hardware RAID 0/1/5/10 flexibility and up to 300MB/s performance.

Up to 24TB from \$524.00

USB 3.0 + eSATA + FW800



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Harman/Kardon Nova Stereo Streaming System

The recently released Harman/Kardon Nova Stereo System has a minimalistic aesthetic at 165 x 160 x 114mm. In two compact translucent spherical speakers, available in black or white, Harman provides 2.5in drivers and 1.25in tweeters. The computer speakers have a frequency response of 70Hz to 20kHz, and Bluetooth, NFC and 3.5mm auxiliary connectivity options.

\$399 / Harman/Kardon / www.ehifi.com.au



**GEAR
GIZMOS
GOODIES**

GADGET GUIDE

BY ELLEN WU



Navman MY600LMT

Looking for a new navigator? The latest MY-Series GPS unit from Navman may just be the perfect solution for you. The Navman MY600LMT includes live traffic updates, parking assistance, and spoken safety and speed limit alerts. The unit features Bluetooth Hands-Free and Rapid Map Refresh, which offers a monthly GPS map and speed camera update.

\$199
Navman Technology
www.navman.com.au



RØDE NT-USB

The RØDE NT-USB is a studio-grade microphone with a digital USB interface compatible with Mac, Windows and iPad. The NT-USB features a 3.5mm zero-latency stereo headphone monitoring jack, dials to control monitoring levels and mix between the computer and microphone input. The NT-USB can be used for recording musical performances, podcasts, voiceovers and more.

\$169
RØDE
www.rodemic.com



Moshi Digits

If you can't let go of your iPhone or iPad, Moshi Digits has recently released gloves, which are touchscreen and winter friendly. The gloves are dual-layered with special conductive fibres and also feature a GripTrak pattern on the inside of them for a firm hold. The Digits are available in light grey or dark grey in small to large sizes.

\$39.99
Moshi
www.moshi.com



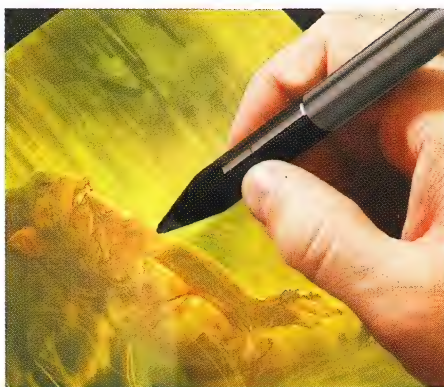
Canon PowerShot SX400 IS

If you're looking for a new, lightweight camera for all your adventures, Canon's PowerShot SX400 IS may be worth considering. Featuring 30x Optical Zoom, 60x Zoom Plus and an in-built Intelligent IS, the PowerShot has a DIGIC 4+ processor and 16-megapixel CCD sensor. The camera is available in red or black.

TBA

Canon

www.canon.com.au



Adonit Jot Touch with PixelPoint

Adonit has just launched a pressure sensitive stylus that may just be what digital artists have been craving. The updated stylus boasts a 3.8mm tip thanks to PixelPoint technology, which Adonit believes will provide 90km of drawing distance, and 2048 levels of pressure sensitivity. Adonit's recent collaboration with Adobe means the Jot Touch with PixelPoint features an Adobe Creative Cloud connection.

\$149

Adonit

www.adonit.net



OtterBox Symmetry Series

The moment when your phone makes that fall from the warm safety of your hand to the hard floor is a heart-stopping experience. Luckily, the new OtterBox Symmetry Series aims to protect our precious gadgets from bumps, falls, cracks and smashes. Slim and lightweight, the Symmetry Series has raised edges to keep the touch screen safe and internal synthetic rubber to protect from shocks.

From \$39.95

OtterBox

www.otterbox.com

Philips M1X-DJ

The Philips M1X-DJ features two professional grade jog wheels, cross faders and controls. With an output of 80 watts, the portable DJ sound system will allow you to play tunes for five hours on eight D cell batteries. The M1X-DJ is optimised for iPad and compatible with the iPhone via an Apple Lightning connector and Bluetooth wireless connectivity.

\$549.95 / Philips / www.philips.com.au





ORGANISE YOUR iTUNES LIBRARY

THE KEY TO KEEPING YOUR LIBRARY IN ORDER: GOOD TAGS

Music has a way of making people a bit compulsive. If you're going to spend time sorting your songs, at least do it efficiently. We asked KIRK MCELHEARN for advice on tagging tracks – the key to iTunes organisation. Follow his tips and maybe you'll have time to actually enjoy all that music.

ENTERING DETAILS

THE RIGHT WAY TO TAG EVERYTHING

IMAGINE WHAT YOUR iTunes LIBRARY WOULD BE LIKE IF ALL YOUR SONGS HAD RANDOM CHARACTERS FOR THEIR SONG, ARTIST AND ALBUM NAMES. YOU WOULD NEVER FIND WHAT YOU WANT TO LISTEN TO. BUT EVEN IF YOUR LIBRARY'S TAGS ARE MOSTLY CORRECT, ANY ERRONEOUS TAGS – A MISPELLED ARTIST NAME, FOR INSTANCE, OR A SONG TITLE WITH A TYPO – MAY PREVENT YOU FROM LOCATING THE FILES YOU'RE SEEKING. AND IF YOU'VE LEFT SOME TAGS BLANK, SOME OF YOUR TRACKS OR VIDEOS WON'T DISPLAY IN CERTAIN VIEWS.

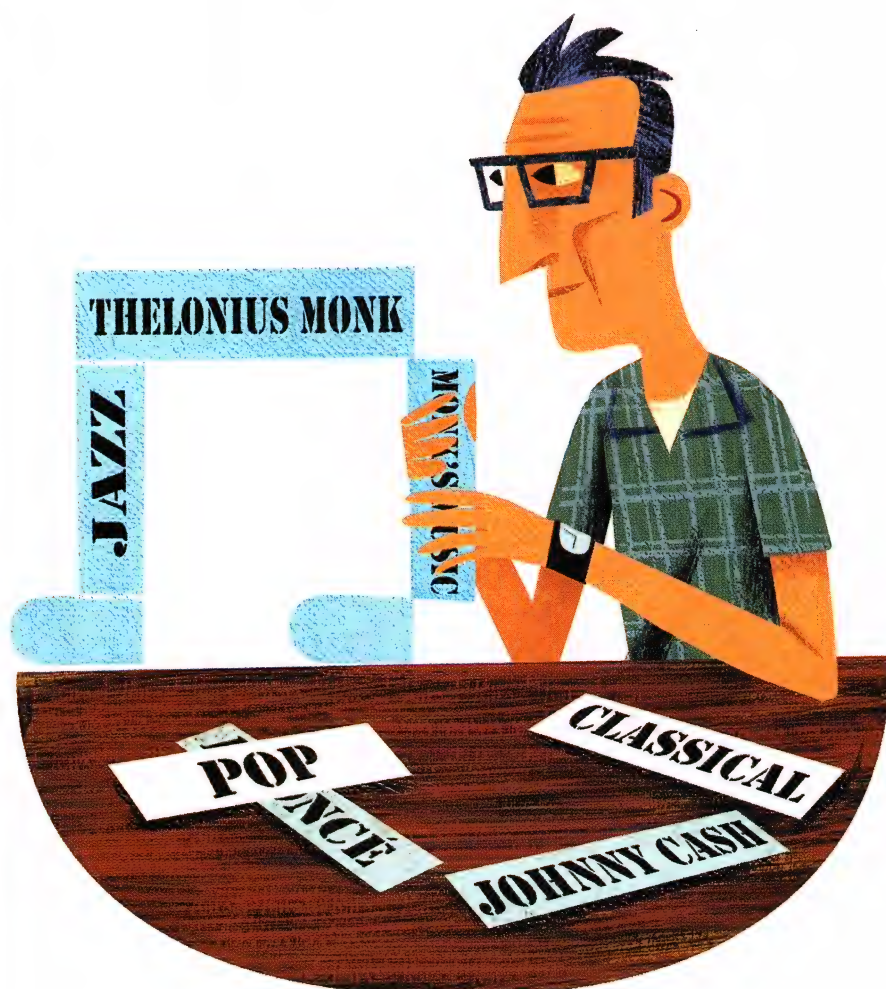
For all these reasons it's a good idea to take a close look at your iTunes library and ensure that your files' tags are filled in and correct. To do that for an individual item, simply select a track or video and press \mathbb{I} to bring up the item's information window.

The Info tab within this window contains many of the item's tags, but the other tabs provide additional tag fields – the Show and Episode Number tag fields under the Video tab, for example. If you want to apply the same tag to multiple files, select all those files and press \mathbb{I} to produce the Multiple Item Information window, which is largely similar to the single-item version.

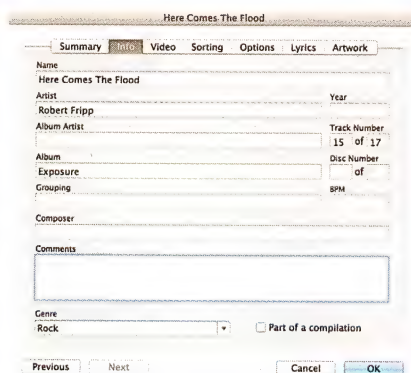
TAGGING STRATEGIES

You need not enter metadata in every available tag field, but some tags will help you manage your music and find what you want to play. Here's a bit of advice regarding the appropriate tags to use on different kinds of music.

Pop, rock, hip-hop, dance music. If you're a casual listener of popular tunes, you don't need to worry much about the



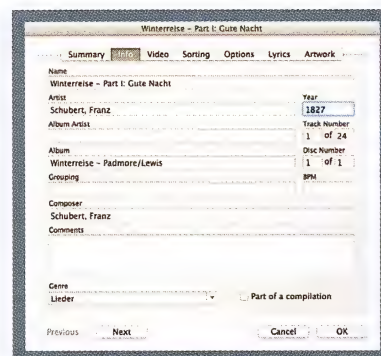
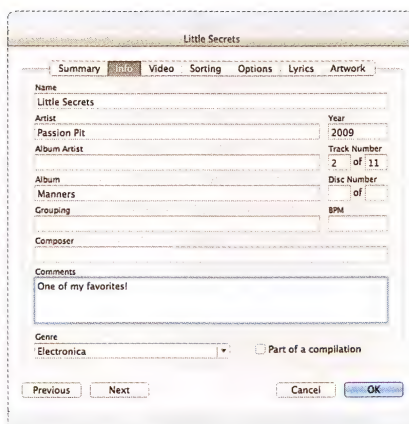
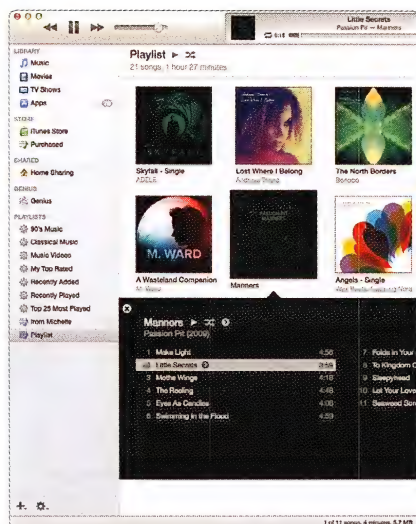
more esoteric tags. Sticking to the basic items should suffice. You need to fill in the Name tag for all songs, but also the Artist tag and maybe the Album tag.



One at a time. To edit tags for a single track, select it and press \mathbb{I} . The tabs in this window let you change different tags and settings. Most of them are in the Info tab.

You may want to take advantage of the Album Artist tag as well. Many popular songs have 'featured' artists – a Beyoncé song with Jay Z, for example. Such a song should have the Album Artist tag set to Beyoncé so that it stays grouped with her latest album (assuming that you've purchased the entire album). But you could make the Artist tag either Beyoncé & Jay Z or Beyoncé (feat. Jay Z) so that you can easily find that duo's music later on.

You may wish to fill in the Genre tag if you search for music by genre. (See page 42 for more about the Genre field.) If you like to sing along, go ahead and insert lyrics in the Lyrics tab. And if you're serious about maintaining your classic-rock collection, add the year in which the album was recorded or released so that you can more easily pull up songs from the '60s, '70s or '80s.



Jazz, show tunes, soundtracks. For these musical varieties, in addition to the basic tags above, you may want to enter more granular information. The Album Artist tag is an important one for these genres.

For a Thelonius Monk Quartet with John Coltrane at Carnegie Hall album, for example, you have a few options. You could set the Artist to Thelonius Monk or to Thelonius Monk and John Coltrane. And you could assign the Album Artist field

to either Thelonius Monk, The Thelonius Monk Quartet, or Thelonius Monk and John Coltrane. Or you could leave the Album Artist blank. It all depends on how you classify such an album: Is it a Monk album with Coltrane joining in, or is it a Monk and Coltrane album?

The Composer tag can be important for this type of music, too. When using this tag, decide whether to list composers by their surname first – should it be Thelonius Monk or Monk, Thelonius

A very good year. You can fill this field with the year a piece was written, when it was recorded, when it was released or whatever you find most useful.

ADDING DATES TO YOUR MUSIC

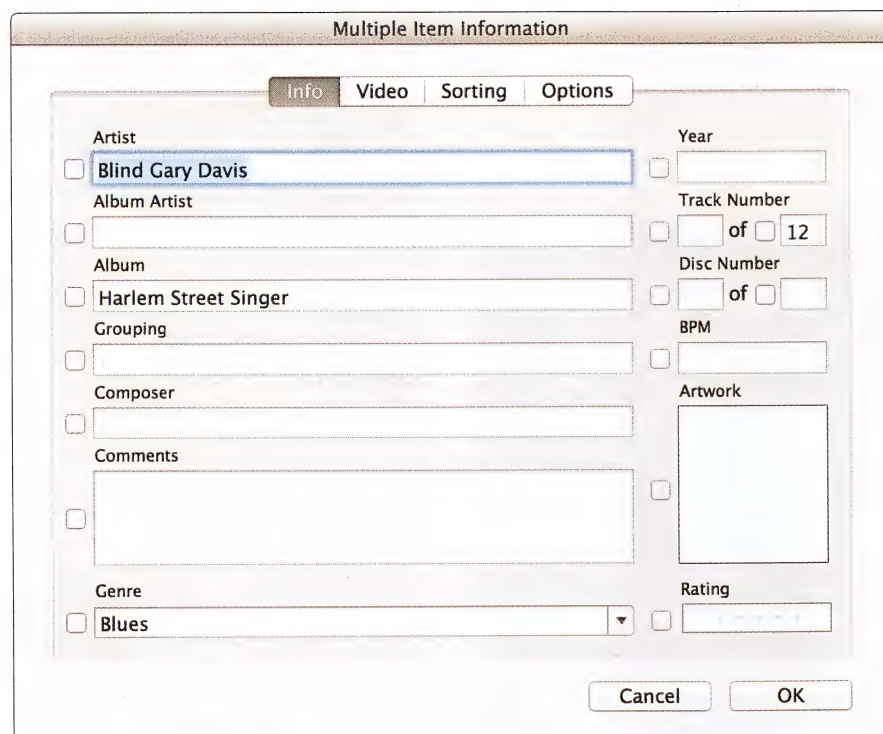
How do I add the composition year to each song in my iTunes library? I have songs dating back to the 1600s, and I want to listen to a brief history of music.

I'm afraid you'll have to do the job manually. The Year tag lets you add a year to any track. You could insert the year a piece of music was written, as you want, but you could instead enter the year the track was recorded, when it was released, or even when it was rereleased for a new, remastered version of an album.

Select a track, press ⌘-I, enter a year in the Year field, and click OK. You can enter the information on multiple tracks by selecting the songs, pressing ⌘-I, entering the year, and clicking OK.

The real difficulty is determining what years to enter in this field, as it will require some research. (Don't use iTunes' Get Track Names feature; it will replace all of your tags for the selected tracks, and you probably don't want that.) AllMusic (allmusic.com) has a huge database and offers detailed credits for many albums, including the names of producers, engineers, and so on.

Discogs (discogs.com) lists several million albums, with release dates and additional information. It's community sourced, and you will find a lot of indie albums there. Finally, for classical music, I use Wikipedia (wikipedia.org), which provides extensive information about classical composers and works.



All together now. To edit tags for all the tracks of an album, select those tracks and then press ⌘-I. Again, most of the tags I discuss in this article are on the Info tab.

in this field? Use the style that is more natural for you (and therefore easier to remember later on).

For these kinds of music, you may also want to add the year of the track, inserting either the year the music was recorded or the year the item was released. (This tag is especially useful for creating smart playlists by year.) For the Monk and Coltrane at Carnegie Hall album I mentioned earlier, for example, I would set the year to 1957, when the concert was recorded, even though the album wasn't released until 2005.

For songs with vocals, why not add lyrics? And if you're a detail-oriented music fan, use the Comments field to enter other tidbits such as precise recording dates, record labels, musicians, and producers.

Classical music. For the classical items in your library, you'll want to use all of the tags noted above, particularly the Composer tag. Think about how you enter genres, as well: You can stick with the one-size-fits-all Classical genre or use custom genres such as Chamber Music, Keyboard, or Opera. Just type any text you desire in the Genre field, and iTunes will save it as a genre listing.

And don't forget about the Grouping tag, which collects tracks under a work's

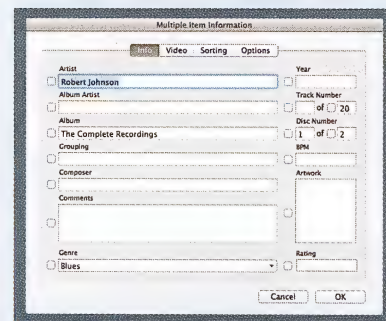
Using 'acoustic fingerprinting,' TuneUp and SongGenie 2 did a good job of figuring out my music, and they applied tags.

name. For instance, you can select all the tracks of a specific recording of Sibelius's String Quartet in D Minor and name them in the Grouping tag. Use the tag similarly to how you would for an album. For instance, I might tag that work String Quartet in D Minor – Emerson Quartet. Although you can't view music by the grouping, you can use the Grouping tag in smart playlists.

Movies and TV shows. iTunes includes tags specifically appropriate for video files under the Video tab of the Info window.

For TV shows, you can insert the name of the series, the season number, and the episode number. Doing so will make navigating through multi-season series with an Apple TV much easier.

Movies don't need the same kind of information in their tags, of course, but if you wish, you can add details about a film in the Video tab's Description field.



Eliminate duplicate artists. Change the Artist tag and then change it back.

WHEN TWO IS TOO MANY

I have a number of artists in my iTunes library that show up twice in Artists view. In some cases, a few songs from one album appear under one occurrence of the artist's name, and the remainder show up under a second occurrence. How can I fix this?

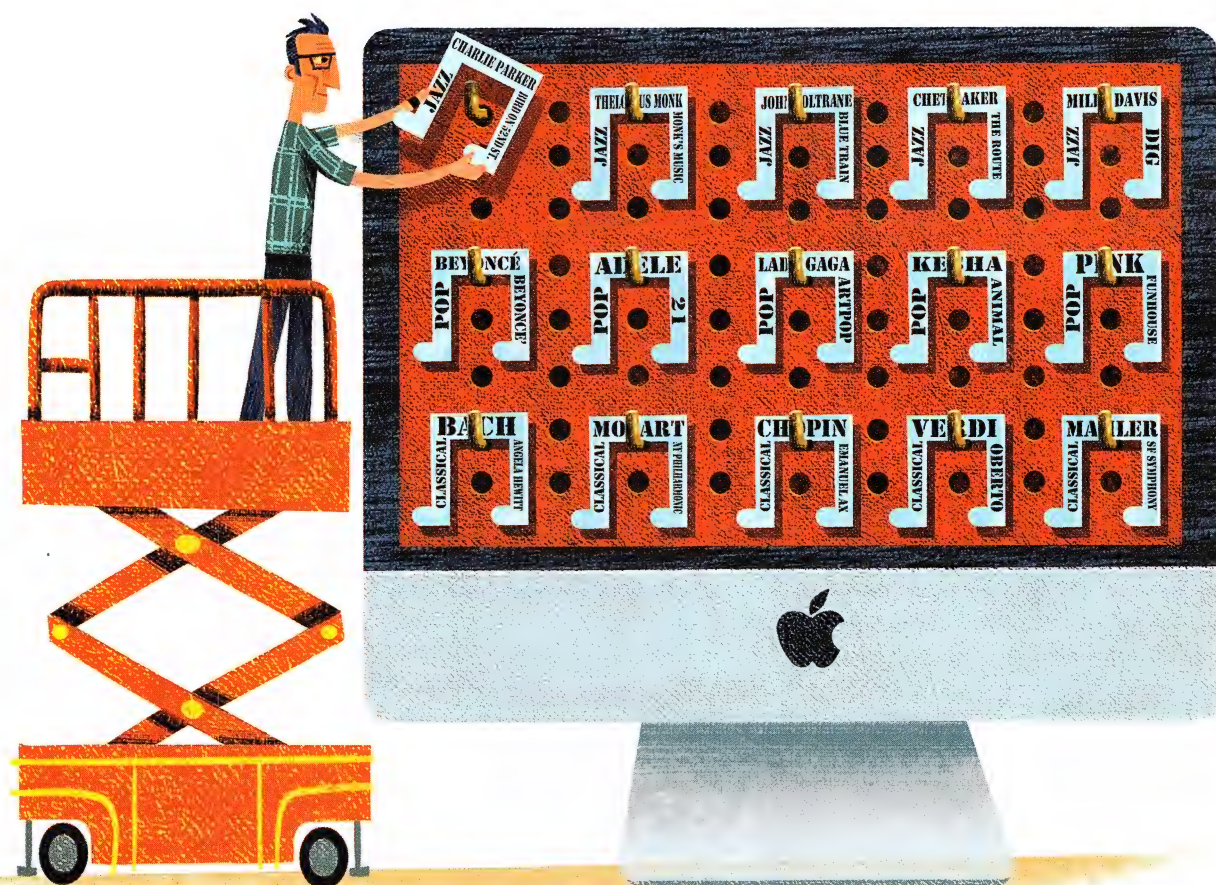
If the artist has exactly the same name in both cases, then this problem seems to be a result of tag corruption or unexpected iTunes library behaviour.

I corresponded with the reader who sent in this question, and the affected files looked fine. I saw no trailing spaces after the artist's name, which can cause duplicate entries. The Album Artist tags were ok, too, and the files were all of the same genre.

Here's the solution we found: Select all the tracks by the artist, press ⌘-I to display the Multiple Item Information window, and then change the artist's name to anything – the artist's name with an additional character at the end, say, or something like The Marx Brothers. Click OK. Select the tracks again, press ⌘-I, change the name back to the correct one, and click OK. This procedure fixed whatever it was in the tags that was causing the duplication.



Mystery solved. SongGenie 2 and similar utilities can identify unknown song files and correct missing or erroneous tags.



Unfortunately, iTunes offers neither a Director tag nor an Actor tag for movies, but you can put either of those names in the Artist field; if you want to note several cast members for a film, you can place their names in the Comments field within the Info tab.

CORRECTING ERRORS

HOW (AND WHY) YOU SHOULD CLEAN UP YOUR ITUNES TAGS

NOW THAT YOU'VE TAGGED THE MEDIA IN YOUR ITUNES LIBRARY, I WANT TO SHOW YOU HOW TO CLEAN UP TAGS YOU PREVIOUSLY APPLIED. WHAT DEFINES A 'DIRTY' TAG? SONG NAMES MAY HAVE RANDOM CHARACTERS, PERHAPS. OR MAYBE WORDS ARE MISSPELLED OR INCORRECTLY CAPITALISED. OR TRACKS ARE

ATTRIBUTED TO THE WRONG ARTIST. SUCH ERRORS CAN MAKE IT HARDER TO ORGANISE YOUR LIBRARY AND FIND THE MEDIA YOU WANT. THE FOLLOWING TIPS AND TRICKS WILL HELP YOU SWEEP OUT THE COBWEBS.

Depending on where you get music (no, I'm not judging you), you may have some tracks with excellent tags. Other tracks might have incomplete information. I've downloaded music with title tags of Track 1, Track 2, and so on. I've ripped CDs and discovered that the best available information from Gracenote (the online database iTunes uses to fill in tags) is insufficient. I've got music tagged with extra words, names and much more.

I'm slightly tag-obsessive, but only because I want to be able to find my music, and because I use smart playlists that depend on accurate tags. Here are some of the ways I correct problems.

WHEN YOUR TAGS ARE A DISASTER

Let's start with a worst-case scenario: You have songs with tags that are gibberish. You know what the music is, but you don't want to spend time playing each track and entering the tags manually. A couple of apps can step in.

I set up a test with the help of Doug Adams, purveyor of Doug's AppleScripts for iTunes (dougscripts.com). He made a custom script that replaced the Name, Artist, Album, Genre and Year tags with random characters. (For the Year tag, the script used a random year.) I took 500 tracks, some of which were popular and others less known, and ran them through Doug's Tag Munger script. The mess this script created was amazing.

I then processed these tracks with two apps that claim to clean up tags. The first was TuneUp Media's TuneUp (US\$39.95 per year or US\$49.95 lifetime subscription; www.tuneupmedia.com). The second was Equinux's SongGenie 2 (US\$29.99; www.equinux.com).

Using 'acoustic fingerprinting', both apps did a good job of figuring out what the music was, and they applied tags to the files.

TuneUp found all but 14 tracks and made playlists with the tracks it cleaned and the ones it couldn't find. I could then review the 14 remaining tracks and try to identify them.

SongGenie 2 did almost as well, finding all but 23 tracks. It didn't assemble playlists, but in its window I could see and play the unidentified tracks; from that point I could manually update their tags. SongGenie, however, did worse than TuneUp on album names, getting many incorrect. Both apps suffered from a few glitches, too.

Both apps found album art, though much of it was wrong. (Since tracks can come from different albums, that isn't really the apps' fault.) And for many tracks, both apps failed to find the genre or found the wrong one. Even so, such apps are useful for cleaning a library. They can fix a lot, and SongGenie 2 can add lyrics.

TWEAKING TAGS

That was an extreme example, however – you're more likely to want to polish your tags. When I download music or rip CDs, I use AppleScripts (all from Doug Adams) to fix inconsistencies.

Albumize Selection. When songs lack track numbers, first put them in a playlist and drag them into order. Then run the Albumize Selection script (bit.ly/1kkjtel), and it will apply track numbers, such as 1 of 10, 2 of 10, and so on, so that your albums will play in the correct order.

Artist – Name Corrector. Sometimes tracks have tags in the format Artist – Song Name. One Doug Adams script (bit.ly/1nP02Hb) puts the artist's name in the correct tag and leaves the song name where it should be.

Remove Characters From Front or Back. I use this script (bit.ly/1nVNe2b) to fix tags that have extraneous information

at the beginning of the name (composers' names, say), or at the end (such as [Live]).

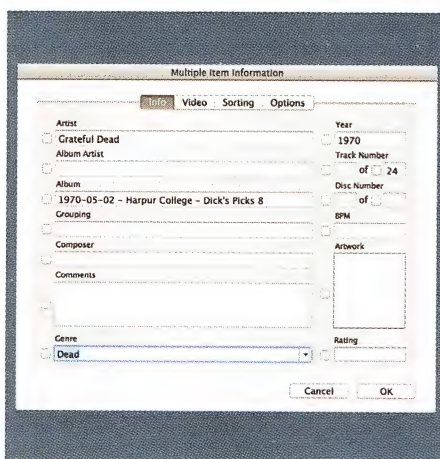
Proper English Title Capitalization.

It irks me to see titles such as 'Beat It On Down The Line' (it should be 'Beat It on Down the Line'), or 'Girl From The North Country' (which should be "Girl from the North Country"). This script (bit.ly/1lQj8ZL) fixes them.

This Tag That Tag. At times, tag information is in the wrong place – the artist name is in the Album tag and the song name is in the Artist tag, for example. This script (bit.ly/1k55HcZ) allows you to swap, copy, append or prepend data from different tags.

Search-Replace Tag Text. This script (bit.ly/1o8nj2S) performs a basic find-and-replace operation for any text in all the main tags. You can, for instance, replace one specific word with another, or you can delete a certain word or phrase by leaving the Replace With field blank. I recommend tagging music as you rip it or when you add it to your iTunes library. This will save you time later, when you decide to fix everything at once. It takes only a minute to tag an album, and the above tips and tools can make doing so simpler. Keep your tags clean, and you'll find the items you want a lot more easily. ☞

Custom genre. Choose a genre from the pop-up menu, or just enter your own, as I did here.



INSERTING OR EDITING GENRE TAGS

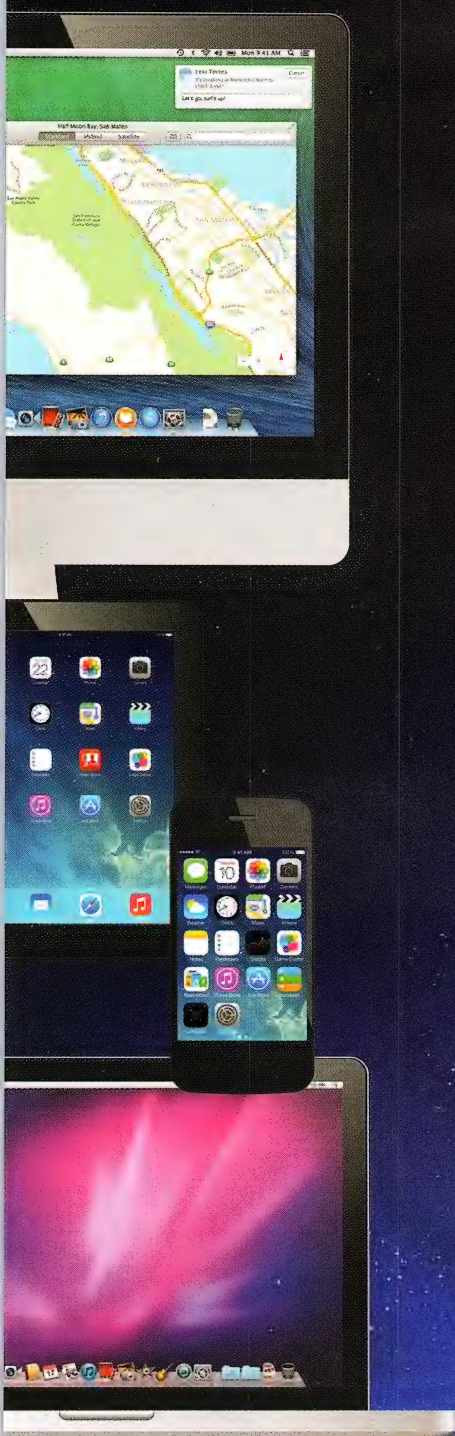
Many of my songs are either missing their genre or have an incorrect genre assigned. I know I can go in and manually edit them, but I would like some assistance. Is there a site that provides genre labels for songs?

TuneUp and SongGenie 2, the two apps I describe on page 41 can clean up assorted tags, including the genre. Genres are a personal thing. You may want broad genres (such as rock, jazz, and classical) or more detailed ones (like progressive rock, bebop and baroque). I've written about the over-genre-fication of music (bit.ly/1lQkRyb), which can confuse listeners who are not in the know, but if you're certain about the genres you want, then you can use anything in your tags.

My strategy is to use genre tags that help me find my music quickly. So, within my classical music, I use genre tags such as Keyboard, Opera and Orchestral. I've set up only one Jazz genre, and I don't split Rock into subgenres. I do have specific genres, however, for certain artists such as Bob Dylan and the Grateful Dead; I have so much music by each of them that it's better they be on their own.

However, my son, who listens to a lot of electronic music, doesn't bother to add genres to his files' tags. He just chooses his music by the artist. If you don't browse your music by genre, you may not want to take the time to add any genre tags.

iTunes offers a number of genres in its Genre tag menu, but you can enter your own. Just type a new genre for one or more tracks in the Info window and click OK, and iTunes will add it.



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Why iOS 8 will matter to educators

Here's what one iPads-for-education expert thinks about the newest iOS and its benefits for schools. BY FRASER SPEIRS

Several years ago, I implemented the world's first whole-school, one-to-one iPad program (bit.ly/1AsK9MK), in which all students in the school use iPads full-time. The iPad has served us well, but recently I started to worry that it would always be the Mac's little sibling. Before WWDC last year, I wrote a blog post about the limitations of iOS that we'd discovered when using it for serious productivity work.

Last year, I didn't get much that was on my iOS 7 wish list. (We did get AirDrop, and it has been transformational in how easily it lets us move large files around the classroom.) At WWDC 2014, Apple delivered on a huge chunk of my wish list with iOS 8, and I couldn't be happier.

EXTENSIBILITY

The critical iOS 8 feature for someone who wants to use the iPad as a primary computing device is extensibility.

Until now, iOS apps have had limited means of working together. For example, if I want to save a webpage in Evernote on my iPad, the fact that Safari and Evernote cannot communicate directly is a serious impediment.

Extensibility will end that. Apps such as Evernote or Pocket, for

instance, could provide an extension that hooks into Safari and clips the current webpage to their respective services, without the user leaving Safari.

The benefits don't extend just to web browsing. Twitter is a huge source of my read-later material. In iOS 7, the ability to send links to Pocket has been something that the makers of apps such as Tweetbot and Twitterrific have had to build in. But what if I want to send my Twitter links to Evernote instead? Under iOS 7, I'd need to lobby the developers of the apps I use to incorporate Evernote support. In iOS 8, the Evernote developers could make such a thing happen themselves.

Extensibility promises to open up a whole new range of workflows – and to make them accessible to ordinary users.

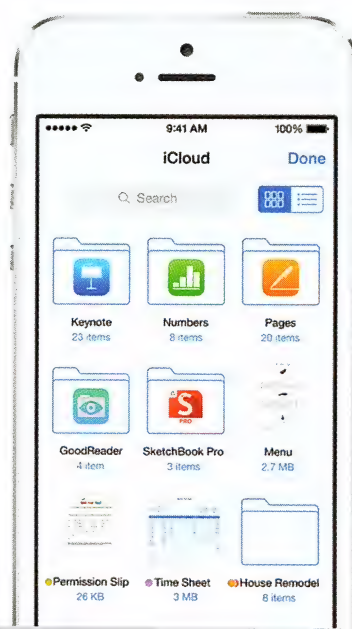
iCLOUD DRIVE

As a teacher, I have gone from spending time in each lesson helping students find the files they saved somewhere on their Macs, to having them readily understand that 'your Pages files are inside Pages' on the iPad. iOS's reworking of the file system has been a huge plus for those of us who work with novice users.

iCloud Drive puts the file system back into iOS. I'm conflicted about it.

First, from a teaching point of view, I hope that Apple is not introducing the ability to 'lose' your files on iOS by saving them in the wrong place. Apple does still seem to support the concept of having app-specific folders for files, but I'm reserving judgement.

Second, if every app adopts iCloud Drive, I wonder if that will lead to students eating up their iCloud storage allocation more quickly. Apple is lowering the prices for extra storage, but schools will need a way to provide students with more storage that doesn't involve handing out gift cards. It's not just about the cost; it's about how easy or difficult Apple makes it to extend iCloud storage limits for students.



Stay organised. Cloud Drive adds file-management functions, but it may confuse novice users.



MANAGEMENT FUNCTIONS

When I started deploying iOS in my school in 2010, the process of setting up devices and deploying apps was exactly the same as the process I followed to set up my personal iPad. That process was never going to scale beyond 100 or so devices. Today, iOS deployment has become far more professional and scalable. What iOS 8 brings to the table in this regard is fairly minor but still very welcome.

For starters, it offers new Mobile Device Management controls and queries that allow a management server to interrogate a device about its state. One I'll use heavily is the ability to discover when a device last backed up to iCloud; with it, I'll be able to tell when students are having trouble with their backups.

The Apple TV has become de rigueur for schools making heavy use of iOS, but managing the boxes on large school networks has always been challenging. Sending traffic between iOS devices and the Apple TV boxes across such networks has been problematic for schools where, for example, the student network and the staff network are isolated

from each other. iOS 8 promises to solve the problem by eliminating the need for a network between the two devices. Whereas iOS 7 had peer-to-peer discovery, iOS 8 has peer-to-peer discovery and playback.

This development is important in several ways. First, schools with complex networks no longer need to find work-arounds to accommodate the Apple TV. Second, schools with no networks can still buy and use Apple TV boxes in the classroom. Third (and this point is dear to my heart as a travelling consultant), visitors to the school will not need to sneak onto the network just to use the Apple TV.

KEYBOARD REPLACEMENT


I have not seen much evidence that the iOS keyboard is a barrier to using iPads. Typing is all about practice, something our students get plenty of. That said, the iOS keyboard has always presented its key caps in uppercase. It's a problem for younger users, who start off not knowing any letters at all, and are always introduced to lowercase letters first. Now that the iOS keyboard is replaceable, I hope some

enterprising developer will build a lowercase keyboard for schools. Just don't set the letters in Comic Sans, OK?

iPAD 2 SUPPORT

In the past few years, schools have been buying the iPad 2 like it was going out of style (which it was; Apple finally ditched it in March). The main reason: device-to-student ratios trump all other considerations. The most important thing is to get to a point where students don't have to share devices, and the iPad 2 made that possible for some schools. I don't have hard data on this, but I imagine that the iPad 2's installed base is disproportionately slanted toward education. The fact that iOS 8 will run on the iPad 2 comes as a relief to many school IT managers.

iOS 8'S PROMISE

Overall, I'm delighted that iOS is coming out of a slightly awkward stage in its development. iOS 8 promises to take the experience of the serious iOS user to a whole new level. I can't wait to see what developers do with it. 

Four ways to control iTunes

Use iTunes without displaying its full interface. BY KIRK MCELHEARN.

With iTunes, you can control music playback from the window, but if you don't want the full interface visible while you listen to music, you have other ways to tell the app what to do. I'll show you how to control iTunes using built-in features as well as third-party apps, so that you can hide the window when you play your songs.

MEDIA KEYS

The easiest way to control iTunes is via media keys, which reside among the F-keys found on the top row of your keyboard. Press the F8 key to play or pause music. Press F7 to skip back – either to the beginning of the currently playing track, if you've played less than 10 seconds of it, or to the previous track. F9 skips ahead to the next track.

To the right of those keys are volume buttons, but they affect the system's volume, not that of the iTunes app. F10 mutes your speakers, F11 decreases the volume, and F12 increases it.

MINIPLAYER

The iTunes MiniPlayer is a floating window that lets you control iTunes without having the full app visible. To show it, choose *Window > MiniPlayer*, or press ⌘-Option-3. To display the MiniPlayer and hide the iTunes window, select *Window > Switch to MiniPlayer*, or press ⌘-Option-M. (You can return to the full window with the same shortcut.)

The MiniPlayer provides more than just Play, Pause, Next and Previous buttons and a view of the album art. Using controls at the bottom of the window or within a menu that appears on the right side of the player, you can rate a track, start Genius, create an iTunes Radio station, and more.

APPLE REMOTE

If you have an Apple remote – the hardware kind, not the iOS app – you can use that to control iTunes on your Mac. You can start and stop playback with the device's Play/Pause button. The click ring surrounding the central Select button lets you move to the previous or next track, as well as raise or lower the volume.

THIRD-PARTY APPS

A number of third-party apps permit you to control iTunes without its window remaining visible.

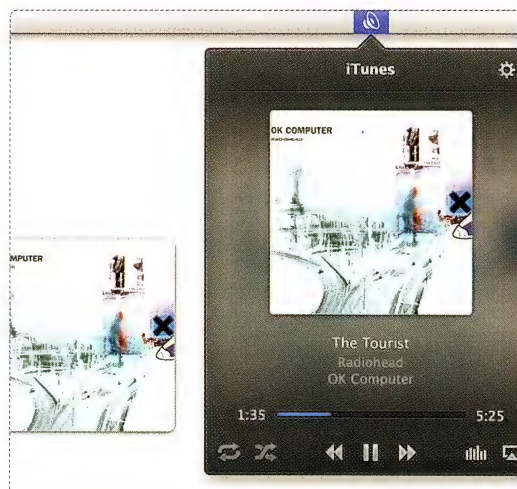
Sizzling Keys. Yellow Mug's free basic version of Sizzling Keys (yellowmug.com/sk4it) gives you a full range of keyboard shortcuts to control iTunes, set ratings, change the volume and more. A US\$4.95 pro version lets you access other controls from the keyboard, such as skip forward or backward, and shuffle and repeat.

Tunelet. This \$2.49 app by Aeolian Apps (aeolianapps.com) is a menu bar controller. Click its menu to access controls, view album art, and search your iTunes library.

Equilibrium. The \$3.79 Equilibrium (sunflowersw.com) doesn't display the name of the currently playing track in the menu bar, but it has a floating artwork controller. Access Equilibrium from the menu bar, and use its full range of controls. You can manage playback, toggle shuffle and repeat, and even select an AirPlay output. The app also has keyboard shortcuts for play/ pause, next, previous and volume.

Skip Tunes. The \$3.79 Skip Tunes (skiptunes.com) also offers control buttons in the menu bar. You can click to play or pause music, or to go to the next track. Click the music-note button to display a floating controller with album art and additional controls.

The app can control Rdio and Spotify, too, and it provides notifications with album art.



Wi-Fi standards are evolving at a fast and furious pace

A new generation of high-speed routers is hitting the beach – and the next wave is right behind it.
BY ERIC GEIER.

Now that blazing-fast routers based on the IEEE 802.11ac wireless networking standard are finally entering the mainstream, intrepid engineers are busily cooking up all-new hardware that will make the current gear's performance seem downright poky.

The truth is, most of the first 802.11ac routers were based on draft versions of the standard. Although some newer Wave 1 models, such as Netgear's six-antenna Nighthawk X6, are implementing cool tricks to squeeze more performance from that technology, Wave 2 802.11ac routers will hit in early 2015 – and they will be a lot faster. The next standard, 802.11ax, is not far behind. There's no point in trying to cheat obsolescence by putting off your next router purchase, because the industry is always hard at work developing the current standard's successor.

NEW-WAVE TECHNOLOGY

What's so special about 802.11ac? For starters, it operates on the 5GHz frequency band, which is less crowded than the 2.4GHz band; as a result, its signal is less susceptible to interference.

In addition, its performance significantly exceeds that of the previous standard. SU-MIMO (single-user multiple-input/multiple-output) technology, one of the hallmarks of

the older 802.11n standard, supports transmission of multiple spatial streams to a single client. This technology carries over to 802.11ac, which adds a more powerful modulation technique to produce a maximum physical link rate of 433 megabits per second (mbps) per spatial stream.

Because a Wave 1 802.11ac router can support up to three such streams simultaneously, it can send and receive data at a maximum physical link rate of 1.3 Gigabits per second. An 802.11n router, in contrast, handles up to three spatial streams with a maximum physical link rate of just 150 mbps each (for aggregate throughput of 450 mbps).

The Wave 2 802.11ac routers, slated to arrive next year, will support MU-MIMO (multi-user multiple-input/multiple-output) technology, which allows them to transmit multiple spatial streams to multiple clients simultaneously.

The upcoming Wave 2 routers will also bond multiple channels on the 5GHz frequency band to create a single channel that provides 160MHz of bandwidth. (Wave 1 802.11ac routers can bond 5GHz channels, but the bonded channel is only 80MHz wide.) And whereas 802.11n and Wave 1 802.11ac routers support a maximum of three spatial streams, Wave 2 802.11ac routers support up to eight. Finally, Wave 2 routers will


deliver maximum physical link rates in the range of 7 to 10 gbps.

NEXT IN LINE: 802.11AX

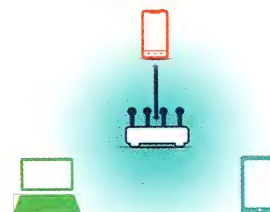
Although the Wi-Fi Alliance doesn't expect to ratify 802.11ax before March 2019, products based on a draft could reach the market as early as 2016.

One of the top objectives of 802.11ax is to quadruple wireless speed to individual network clients – not just to increase the overall speed of the network. The 802.11ax standard also aims to improve Wi-Fi speed and reliability in environments with many users, such as hotspots located in public venues. And the technology will use OFDMA (orthogonal frequency-division multiple access) to boost the amount of data a router can transmit.

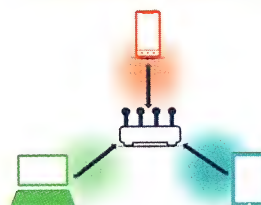
WI-FI FOR EVERY NEED

The future of Wi-Fi centres on developing standards that meet the demands of wirelessly connected devices. Since future generations of devices will most likely include everything from enterprise printers to egg timers, we'll need all of the Wi-Fi flavours we can get. 

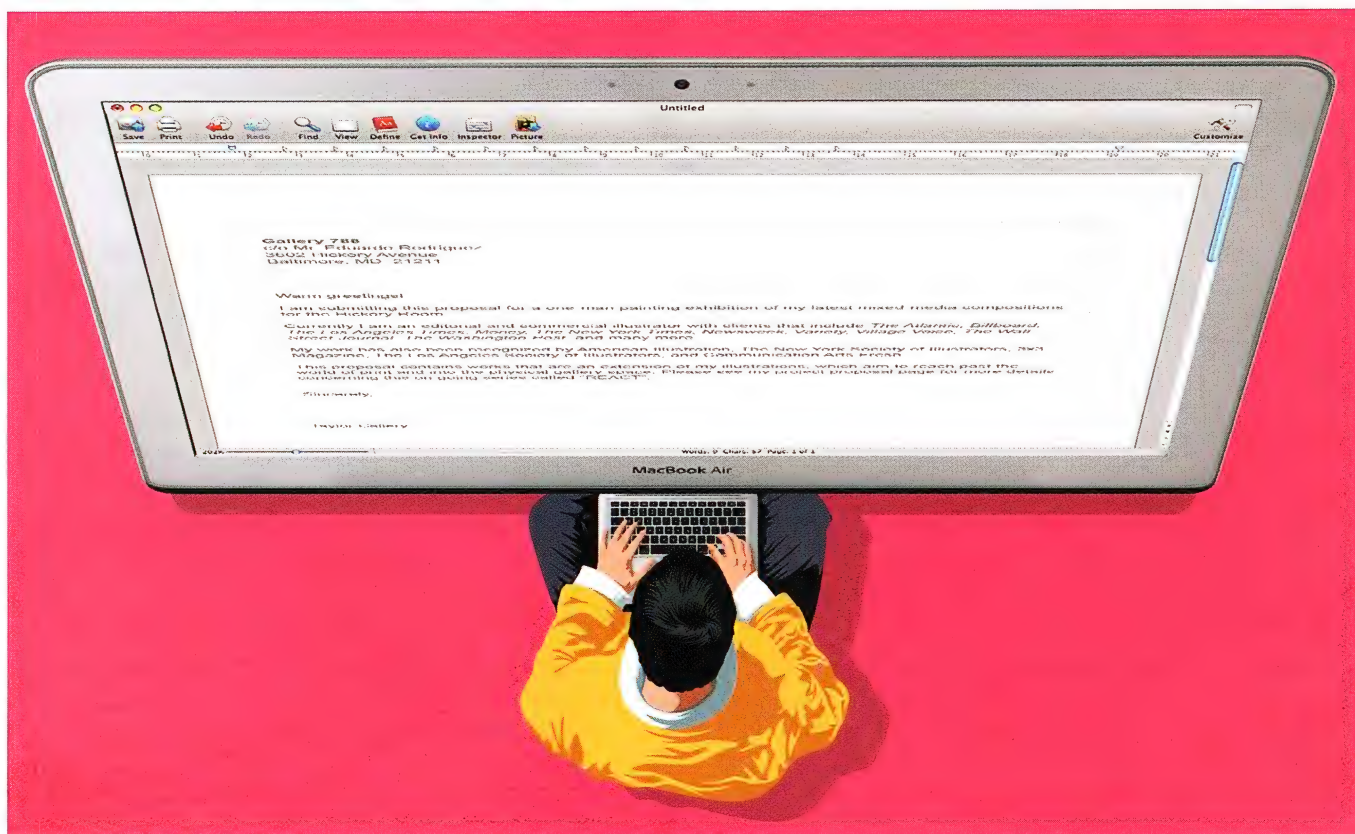
Wave 1 Routers
The current 802.11ac routers serve one device at a time.



Wave 2 Routers
The next generation, due in early 2015, will serve multiple devices simultaneously.



New wave Wi-Fi. This illustration from Qualcomm, a maker of wireless telecommunications products and services, compares single-user and multi-user MIMO.



Maximise your small-screen productivity

How to work with optimum efficiency on a laptop with a small screen.

BY MATT GEMMELL

In most respects, I already own what is (for me) the perfect work machine: an 11in MacBook Air. I currently have a July 2013 Haswell-based model with 1.7GHz, 8GB of RAM and a 128GB solid-state drive. My perfect machine would be the same compact size (30 x 19.2 x 1.7cm), have the same light weight (1.08kg), deliver the same incredible battery life (typically more than 13 hours under OS X Mavericks) and offer the same apparent screen resolution (1366 by 768 pixels) except with a Retina display. That's it for my wish list. I've never been happier with a computer than I am with this one.

I also have a 27in iMac with an external 24in screen, a graphics tablet, a batch of external drives and so on. I use it during the day at my desk because... it's there, I suppose. For writing software, it is an excellent system because it lets me keep both a large Xcode window and the iOS Simulator open at the same time. But it is wildly overpowered for my needs, even for when I was still a developer. I'm probably going to get rid of it.

My favourite machine by far, though, is the 11in Air. Evenings, weekends, when I'm on the exercise bike, when I'm working elsewhere or travelling, and when I want a change of scenery during the day, I'm on

the Air – productively.

Large screens are comfortable to work with, I admit. The expanse of screen space hints at creative possibilities. And you probably wouldn't want to perform full-time graphics work or app development without a large screen, an additional screen, or both.

That said, for most things that people want to do on a computer, a desktop monster isn't necessary. I don't think you even need a 15in screen, which is essentially a portable desktop. You just have to know how to use a small screen effectively. Here's how I do just that.

CONTROL YOUR ENVIRONMENT

Small screens differ radically from large ones. You have to be conscious of where stuff goes and what's visible. Many apps have window-management features built in; on an 11in screen, you'll want to pay attention to them.

Let's use my workhorse app, BBEdit, as an example. Once you've configured a text window in BBEdit to your liking, you can use the Save Default Text Window command to ensure that all subsequent new windows look the same.

I also spend a lot of time in Scrivener. It has multiple sidebars and sections in its one-window-per-document interface, and you can hide or show any of them independently. You can also configure the user interface to suit your taste, and save it as a layout, much as you can with BBEdit. (Photoshop has a similar feature.)

In both apps, I keep the font size in the primary editing areas large, because that's the text I spend most of my time looking at.

You should also consider working in Full Screen Mode. You regain the vertical space that the menu bar (and Dock) usually occupy and windows gain their own Spaces (in the OS X sense of virtual desktops).

I use Mail with the main window maximised (though not set in Full Screen Mode, because doing that would make message windows

modal). Maximising the main window leaves me with loads of room to see mailboxes, the message list, and the preview pane. Likewise, Safari shows enormous amounts of space on either side of webpages. Yes, the pages are vertically short, but they're more than adequate for reading.

I also keep a dedicated Space for social media, where I reply to iMessages. And I always keep my Dock hidden (on all machines); I scarcely ever use it anyway.

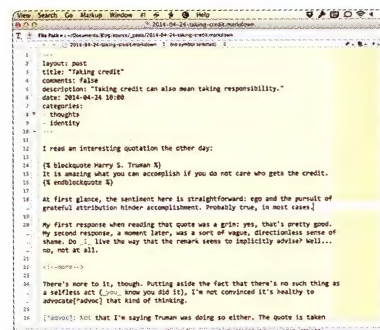
USE THE KEYBOARD

I suspect that many people feel claustrophobic about small screens only if they feel that they're physically interacting with the space. If you're mousing around, you can feel the dimensions. The pointer may bounce off the screen edges and you have a visceral sense of the constraints on the area available.

If you use the keyboard efficiently, however, the sensation of being hemmed in vanishes. You can flip between apps, Spaces and interface elements without experiencing the changes as spatial movement. Instead, you're just switching the user interface around.

Knowing your way around the keyboard interface is the single greatest productivity enhancement you can make on a non-touchscreen device. You can trigger any task that has a keyboard equivalent (and that's almost anything) more quickly with keystrokes than with a pointing device, and the keyboard doesn't require a context switch. Those tiny efficiencies add up quickly.

I recommend that you enable Full Keyboard Access in System Preferences' Keyboard pane in the Shortcuts tab. Set it to All Controls to move the keyboard focus between any interface elements – not just text boxes and lists – using the Tab key. It's amazing what you can do when you can navigate so much more of the UI without taking your hands



right
BBEdit
setup. Once
you've got
a screen
configuration
that you like
in BBEdit,
you can save
it for future
use.

below
App
launcher.
With a
launcher
like Alfred,
your hands
stay on the
keyboard.

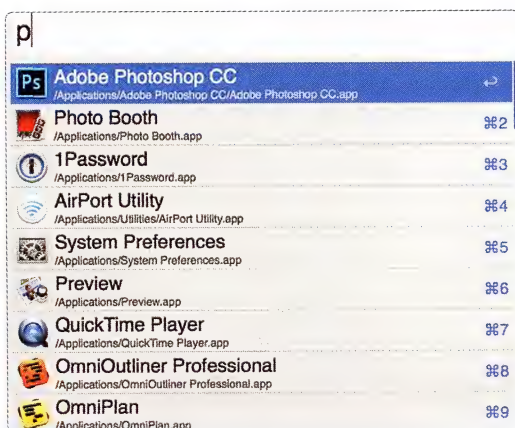
from the keyboard. The spacebar triggers selected nontextual interface elements, such as buttons and pop-up menus, too.

I also advise you to memorise text-editing shortcuts. They can save you hours of painstaking, headache-inducing, wrist-destroying pointer manipulation. If you're editing text, you should never have to touch the trackpad or mouse – not to move the insertion point; not to select; not to cut, copy or paste; not to scroll the window; not to consult the dictionary or correct spelling. You don't need the mouse for any of these things, and you can fly through the associated tasks if you keep your hands where they belong. (For a start with shortcuts, see bit.ly/1k6ukGr).

And I urge you to take advantage of a few useful utilities. I have five that make up my day-one must-install set for any new machine.

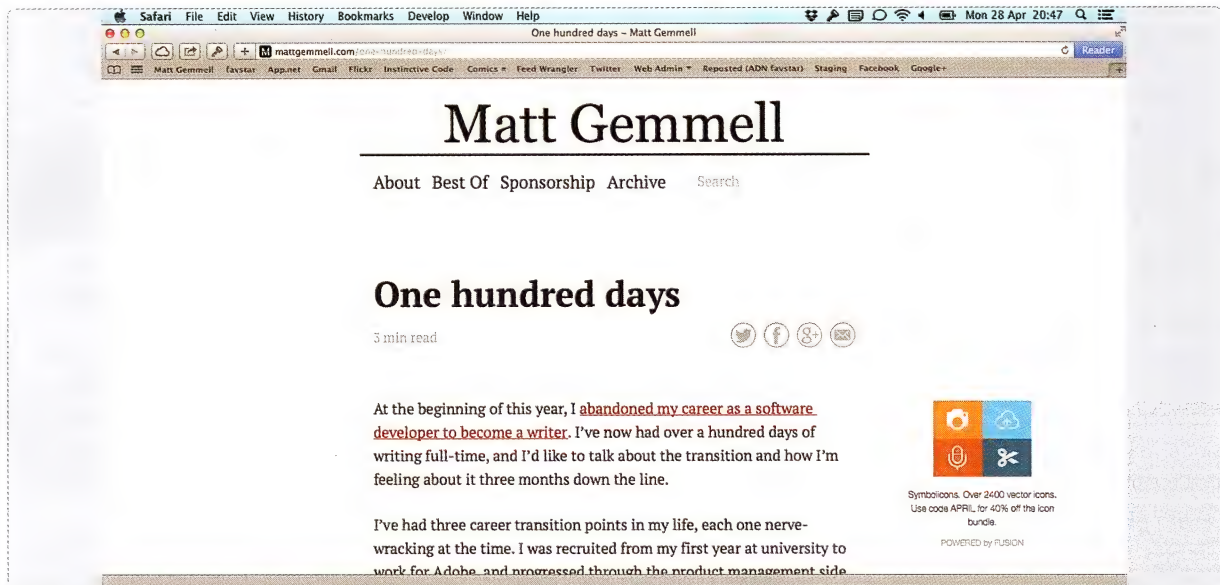
The first is an enhanced utility for app launching and file manipulation. Many are available, but my favourite is Alfred (alfredapp.com). It does every conceivable thing, and I use it many times each day. It functions like Spotlight but with a hundred additional features. Most critically, it lets you find, open and act on files and apps without touching the trackpad. It's surprisingly deep.

Second, you need something to help you manage windows. Traditionally a pointing device handles the tasks of moving and resizing windows, but that's a guaranteed route to headaches – particularly if you're a bit obsessive (as I am) about having things line up properly. Again, various utilities can play this role, but the one I love is Moom (manytricks.com).





Social spaces. Putting similar apps in the same space is more efficient.



Safari screens. Maximising the browser window makes for more-comfortable reading.

Moom lets you move, resize and align windows via the keyboard, and it also allows you to create custom shortcuts to tile windows in arrangements of your choice.

Third, you'll want a utility for writing quick notes. I use Sticky Notifications (instinctivecode.com), which I created myself; but you can find plenty of capable alternatives (including OS X's own Notes) if you prefer.

Fourth, you must have a password manager, because the days of reusing passwords (or getting away with having weak passwords) are over. You'll want an app that integrates with your other Macs and iOS devices,

and that you can control completely from the keyboard. For me 1Password (agilebits.com) fits the bill.

And fifth, for file sync, I always recommend Dropbox (dropbox.com). Dropbox goes beyond keyboard friendliness to the point of requiring almost no interaction. The entirety of my work lives there, so I don't have to keep track of which machine I worked on last. That's a whole class of file manipulation that I never have to do.

FOCUS, FOCUS, FOCUS

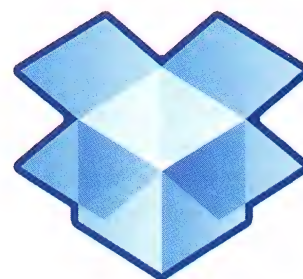
My final piece of advice for maximising your productivity is to

force yourself to work. I use Self Control (selfcontrolapp.com) to block access to social media, shopping sites, online comics, news and RSS feeds for appropriate amounts of time, and my productivity skyrockets. I encourage you to set the blocking period to two hours as a trial, and just see what you can accomplish.

Ultimately there's no substitute for motivation, self-moderation and focus, but there's nothing inherently limiting about small screens either. You can have the best of both worlds: your entire office in an envelope, without any feeling of constraint. ☒

DIY Version Control

Need to keep track of who's doing what when you collaborate on big documents? You could use a fancy version-control system. Or you could adopt this simple process. BY JOE KISSELL



When you collaborate on documents, sharing a folder on a cloud-based storage system such as Dropbox is a convenient way to keep everyone's copies of the docs up-to-date automatically. But nothing in that system prevents users from opening and changing a given document at the same time, which can lead to version conflicts and confusion.

You could avoid this problem – and see who made which changes when – with a formal version-control system such as Apache Subversion (subversion.apache.org), Concurrent Versions System (nongnu.org/cvs) or Git (git-scm.com) to manage their files. These tools ensure that only one person at a time can modify a file. They list who's working on a file at any moment, and they keep a record of changes so that users can recall any earlier version of the file in the future.

For many projects, however, a complex version-control system with its associated software and repositories is overkill. Here is an alternative developed by the editors who work on TidBits' Take Control ebooks (takecontrolbooks.com). It's a simple manual system, based on Dropbox, which mimics version control but doesn't require extra software.

FILENAMES AND FOLDERS

The system uses two simple folders in any book's Dropbox folder – one called Checked Out and the other called Old.

We use a strict naming convention for manuscript files stored in the folders:

A manuscript starts with a title such as 'Book Name 1-jk' (where the number is the version of the file and the last two letters are the author's or editor's initials).

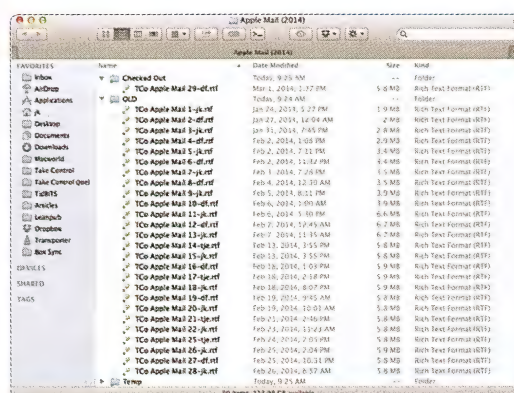
To work on a manuscript, you Option-drag the file from the Old folder into the Checked Out folder to duplicate it; then you rename the new version with the next higher number and your initials: 'Book Name 2-df', for example. No one else touches a Checked Out file. After completing work on it, you move the file out of Checked Out and back into Old. The next person in the editing chain can then repeat the checkout process.

Dropbox maintains its own version history of each file, complete with the name of the user who saved it. But restoring previous copies on the Dropbox website requires multiple steps, and taking those steps replaces the current version of the file. Keeping our own historical versions is an easier and more useful approach.

TRACK CHANGES

We also rely heavily on the change-tracking and commenting features in our word processor of choice, Nisus Writer Pro (nisus.com/pro). Apple Pages and Microsoft Word have similar tracking features.

In theory, collaborators could work in a single document, rather than duplicating and renaming it at each step. But in a document with thousands of changes from dozens



Simple version control.

Our system uses two folders: Old (for inactive files) and Checked Out (for active ones).

of writing and editing passes, the tracked changes and comments overwhelm the text and make it harder to reject a change without preventing other people from seeing it.

So our routine instead calls for each person working on a document to review the changes that the previous person made, accept or reject those changes (so that they cease to be tracked), and then make any additional changes with tracking still turned on. That way, except when a proposed change remains under discussion, each version of the document highlights only the changes made in the most recent writing or editing pass.

With those two processes in place, our authors and editors can collaborate with minimal friction, ensure that their changes never collide, and easily determine when a given change occurred. And we can do it all without any special software beyond the Dropbox client and word processor we would be using anyway. ☐

YOU CAN ASK THE **MACWORLD AUSTRALIA** TEAM ANY MAC- OR APPLE-RELATED QUESTIONS BY EMAILING EDITOR@MACWORLD.COM.AU. ANSWERS THIS MONTH BY CHRISTOPHER BREEN AND DAN MILLER.

STM READER TIP

Unblocking US content

In the April 2014 edition of *Macworld Australia* you recommend the Unblock US and UnoTelly DNS services for watching overseas TV on an Apple TV. But then you say in order to do this on an iGadget you need to run a VPN, which is more difficult.

This is not true! Simply go to *Settings* > *Wi-Fi* and press the (i) button next to your connected network. You can then simply tap the DNS field to edit it, enter the right number and then Unblock US will work. I regularly use BBC iPlayer, Hulu and Netflix on my iPad this way.

The iGadget will remember the setting for that network, and if it is the same one that an Apple TV is on, then both will work with that setting. (Unblock US only works on a single network at a time.) If you want to watch Australian TV streaming, just change the iGadget DNS back to its original setting. (I store the magic numbers in the Notes app for easy recall).

Karl



EACH MONTH, STM gives a prize to the *Macworld Australia* reader who submits the best and most useful tip (undocumented tips preferred). This month's prize is a comfortable and portable STM drifter laptop backpack worth \$169.95.

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? SHARE ITUNES CONTENT WITH YOUR FAMILY RIGHT NOW

I'm interested in Apple's announcement of the Family Sharing feature, where you can share iTunes media with your family. Is there any way my family and I can do something like that now in Mac OS X Mavericks?

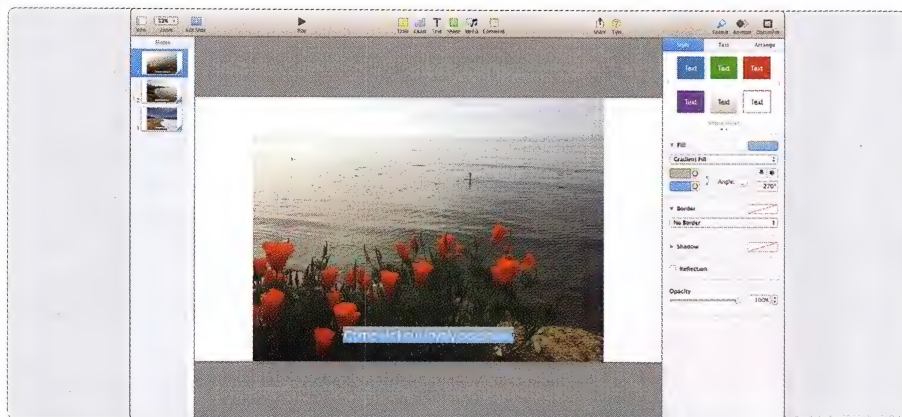
Frank Stillman

A common misconception is that you can use just a single iCloud account per device for everything that the device does. This isn't the case. Your iCloud account and iTunes/App Store/iBookstore account can be different.

At this very moment you can create an Apple ID, link it to a credit card and use that ID with up to 10 devices, including computers. (You can't use the ID with more than five computers, however.) So, when Mum purchases the Residents' *Not Available*, any other device using that Apple ID can also download the album. This works not only with music but also ebooks, videos and apps.

To add that account in iOS 7, just tap *Settings* and then tap *iTunes & App Store*. At the top of the resulting





screen, you'll see an entry for your Apple ID. If you see another ID there, tap it and then tap Sign Out. Then enter the new 'shared' ID.

This procedure may sound pretty close to Apple's plans for Family Sharing, which will ship with OS X Yosemite and iOS 8. Under those operating systems, I imagine that Apple will do everything it can to make a double identity – where you have content that you own as well as family-owned content – more transparent.

? NEED AN ANNOTATED IPHOTO SLIDESHOW? TURN TO KEYNOTE

I have some information that I'd like to present to a group via a slideshow that they'll watch on their computers. I have the pictures I need in iPhoto, but I can't find a way to annotate them. Is it possible to do so?

Doug McGowan

Not in an effective way. I'd turn instead to Apple's Keynote.

Launch Keynote, select the White theme and click Choose. With the latest version of Keynote, the Format button at the top of the window should be highlighted. In the area below this button, click *Change Master* and choose the empty slide at the bottom right of the list. You should now have a single empty slide.

Click the *Media* button at the top of the window, and in the Photos tab navigate to the first image you want to use in the slideshow and click it.

Keynote will add the image to your slide. Now click the *Text* button at the top of the window to add a text box. Enter the text, configure its font and size, and drag it to where you'd like the caption to appear. With the text selected, choose the *Style* tab in the sidebar to the right and then click *Color Fill* or *Gradient Fill* from the Fill area. Choose an appropriate fill to go with your text.

Hold down the Option key, and in the Slides thumbnails area drag the first slide down to make a copy of it. Click that slide's image and press the Delete key to remove the image (but keep the caption). Click the *Media* button again to add a different image.

Press ⌘-Shift-B to send that image to the back so that the caption is exposed. Triple-click the caption to select all of its text, and then enter the caption you want for that slide.

Repeat this process for additional slides. Then select all the slides and click the *Automate* button near the top-right of the Keynote window. Click *Add an Effect* and choose a tasteful transition (Dissolve is always a safe bet).

Finally, choose *File > Export To > QuickTime*. In the Export Your Presentation sheet that appears, don't change the Self-Playing setting in the Playback pop-up menu; just choose how long each slide will play, select an output format (720p, 1080p or Custom), and click Next. In the following window name your movie, choose a place to save it to, and click Export. Soon your slideshow will be saved as an MPEG-4 movie, ready for you to share with the group.

Caption in action.

Keynote gives you the power to create slideshows with both images and captions.

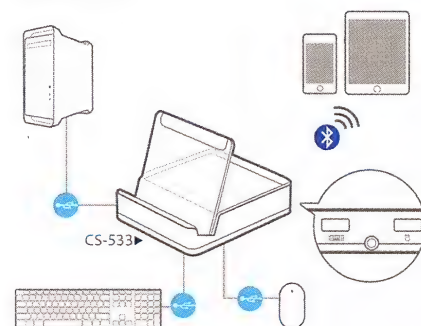
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? SET A DEFAULT 'TO' ADDRESS IN MAVERICKS' MAIL

My husband has three email addresses. I almost always want to send messages to his Mac.com address, and for years that's what Mail automatically used when I typed his name. But when I upgraded to Mavericks, Mail decided that I wanted to send to his Yahoo address. So every time I add him to an email, I have to manually change the autofilled address to his Mac.com address. Is there a way to force Mail to always use the same address?
Fran Drakes

With Mavericks' Mail, autofill will choose the first alphabetical address, regardless of the order it appears in a contact's card. For instance, in the case of bubba1@example.com, bubba2@example.com and bubba3@example.com, bubba1 will be autofill's choice. To work around this, you can take the choice out of autofill's virtual hands and tell Contacts and Mail what you want.

Launch the Contacts app, select your husband's name in your list of contacts, and choose *File > New Group From Selection*. This will create a new untitled group with a highlighted name. Rename that group something like 'hubby'.

Now choose *Edit > Edit Distribution List*, and in the sheet that appears select your 'hubby' group. You'll see your husband's name along with the email addresses that appear on his contact card. Select his Mac.com address so that it turns black and click OK. What you've essentially told Contacts is that within this group (of one), the Mac.com address is the default.

Return to Mail, create a new message, and in the 'To' field enter hubby. When you press the Return key, that address should change to his name and use his Mac.com address. At a later time, should you wish to

send a message to a different email address of his, enter his name rather than 'hubby' and then choose the address you wish to use from the autofill list that appears.

? EXTRACT THE AUDIO FROM A BLU-RAY DISC

I have a concert recording on a Blu-ray disc. I'd like to use my Mac to extract the audio from it so I can play its music on my devices, but I haven't any idea where to start. What do you suggest?
Derrick Crandall

First, you need a Blu-ray player for your Mac. Connect the player to your Mac via the supplied cable (likely a USB connection).

Now, download a copy of MakeMKV (makemkv.com). This is a utility for ripping Blu-ray and DVD discs. Launch MakeMKV; from its Source pop-up menu, choose the Blu-ray player. Then choose *File > Backup* and select a destination large enough to hold the disc's contents (this could

be around 40GB). In the MakeMKV Disk Backup window that appears, enable the *Decrypt video files* option and click OK. MakeMKV will make a copy of the disc and, in the process, remove its protection. This action can take up to an hour.

When you return from lunch, quit MakeMKV and then download a copy of Computer Application Studio's DVD Audio Extractor (dvdae.com/download). The full version of this software costs US\$38.50, but you can use a free full-featured trial copy for 30 days.

Launch DVD Audio Extractor, and from the 'DVD source' pop-up menu choose Folder – Open DVD files from file folder. Click the file browser icon just to the right of this pop-up menu, and navigate to the folder that holds the copy of the Blu-ray you just ripped. Click *Open* within the navigation window and the contents of the now-virtual disc will appear.

At this point it's your job to locate the particular audio files you're after by way of the Title and Chapter

TIP: TURN OFF FILE SHARING FOR MOBILE SECURITY

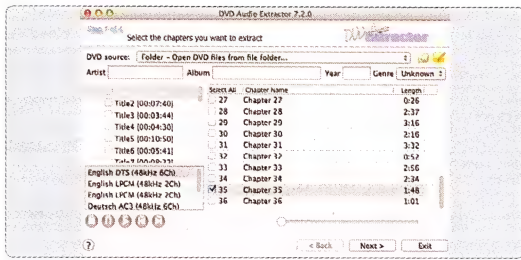
Rob Lefebvre at *Cult of Mac* (cultofmac.com) recently posted a smart tip for improving your Mac's security when you're on an unfamiliar and potentially insecure network (think public Wi-Fi).

One of the things you can do to keep bad actors away from your Mac's files is to turn off File Sharing. To do so, go to *System Preferences > Sharing* and uncheck the File Sharing option. (It's possible to keep File Sharing on and instead configure the OS X firewall to allow sharing only on specific ports, but that's a whole 'nother project.)



If you still want to share files with other Mac users, you can use AirDrop – which creates a temporary opening of your Mac's security gates – instead. First click the AirDrop icon in the Finder's left sidebar or select AirDrop from the Finder's Go menu. (If you don't see that item in the sidebar, go to *Finder > Preferences*, open the Sidebar tab and put a checkmark by AirDrop.)

However you open AirDrop, you should see your user icon in the lower part of the window. When another user on the same Wi-Fi network enables AirDrop on his or her Mac, that person's user icon will appear at the top of the AirDrop window. You can then transfer files by dragging them to that person's icon. The other party will need to approve the file transfer; but as soon as the approval happens, your file will begin to move to that machine.



panes within the app's window. (The play button in the bottom-left corner can help by allowing you to preview chapters.) When you've selected exactly what you want, click Next.

In the following window, choose the output format, sample rate, channels and bit rate for the extracted audio. For an iOS device you might choose AIFF, 44100Hz, stereo and 16 bits. If you have a surround-sound AV system capable of playing multichannel files, you might elect to maintain the original six channels and 24 bits. Once you've made your choices, click Next again.

Now choose your output location

Playing the Blu.

You can pull audio from a ripped Blu-ray disc using a tool such as DVD Audio Extractor.

? COPY ADDRESS LISTS FROM EXCEL INTO APPLE'S MAIL

I have an Excel spreadsheet that contains a list of email addresses. Before Mavericks, I could create an email message that used all these addresses simply by copying the cells and pasting them into a message's To or Bcc field. With Mavericks' Mail the necessary comma is missing between each address when I paste them in. Without the commas I can't send the message, because I'm told

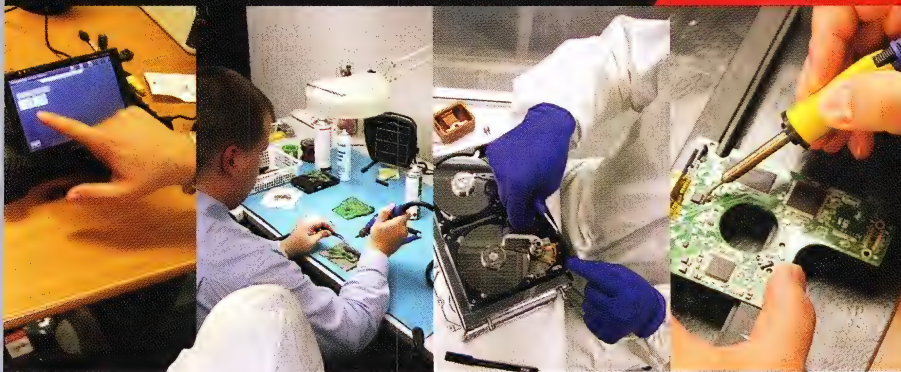
the addresses aren't formatted correctly. Is there a way to fix this?
Benjamin Peacock

There is, and you do it all within Excel. For example, let's say that all your addresses are in Column A, beginning with the A1 cell. Click in the B1 cell and enter =A1&", ". Then press Return. The address in A1 will appear in B1, but it will be followed by a comma (you'll see the entry as "bubba@example.com,").

Move your cursor to the bottom-right corner of the selected B1 cell until you see a black plus (+) cursor. Double-click that corner with the cursor showing, and all the addresses in Column A will appear in Column B in the comma-added format. All you have to do is copy the addresses from Column B into a Mail message.

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Wi-Fi routers

Got the need for speed? From these four leading models, which Wi-Fi router offers the best performance? ADAM TURNER breaks them down for you.

FRITZ!Box 7490

This aerodynamic-looking 802.11ac dual-band Wi-Fi router can run 2.4 and 5GHz Wi-Fi networks simultaneously, plus it also features four Gigabit Ethernet ports. While there's a built-in ADSL2+ and VDSL modem, the first Ethernet port can act as a Gigabit WAN port, which is fast enough to handle the NBN (national broadband network) when it lands on your doorstep. You can also use a 3G/4G mobile dongle, but there's no auto fallback when your DSL connection is down.

The FRITZ!Box 7490 has two built-in VoIP adaptors, with phone jacks on the back and an ISDN (integrated services for digital network) connection. It can also act as a DECT (digital enhanced cordless communications) base station for linking up to six cordless phones. You can set up multiple VoIP numbers, assigned to different handsets (including smartphone VoIP apps), and create multiple voicemail boxes. The FRITZ!Box can even email you your voicemail messages.

You'll also find USB 2.0 and USB 3.0 ports for shared printers and storage across your home network (you can also manage the storage via the browser console). Along with Samba access, there's also DLNA for streaming multimedia along with internet radio streaming to UPnP (Universal Plug and Play) devices around your home.

Along with the ability to run a guest network, the FRITZ!Box offers granular parental controls for individual devices or groups – letting you allocate bandwidth, set time limits, filter websites and block applications. It also supports Dynamic DNS, VPN, static routing and Quality of Service for VoIP, video and other services.

When it comes to performance, the FRITZ!Box 7490 delivers a respectable 309 Mbps. In our long-range test, moving upstairs, the speed dropped by 68 percent.

Bottom line. Brimming with features, but slapped with a hefty price tag, the FRITZ!Box 7490 is a good fit for a busy small or home office ready to embrace Voice over IP.



\$429 / FRITZ!
www.fritzbox.com.au

PROS VoIP; DECT
CONS Expensive

Billion BiPAC 8800AXL

This 802.11ac dual-band Wi-Fi router can run 2.4 and 5GHz Wi-Fi networks simultaneously, plus it also features four Gigabit Ethernet ports. While there's a built-in DSL modem, you'll also find a Gigabit Ethernet WAN port, which is fast enough to handle the NBN when it reaches your home.

This modem/router features rear USB 1.0 and USB 2.0 ports, which let you share printers and storage across your home network. Along with Samba access, there's also FTP (file transfer protocol) and DLNA support for streaming multimedia.

Look under the bonnet and you'll find advanced features such as Quality of Service for IPTV (internet protocol television) and Voice over IP (although it's not a VoIP adaptor). The ability to tweak the Signal to Noise Ratio on your DSL connection helps you squeeze the most from your copper line. This Billion also supports static routes, Dynamic DNS and guest networks, but it can't run a VPN connection and parental controls are limited to turning off the Wi-Fi at certain times of day.

The Billion's party trick is that it supports 3G/4G LTE USB modems, so you can automatically switch across to a mobile network during a DSL internet outage. If your fixed-line broadband is truly woeful, you might elect to stay on mobile broadband, but it can be expensive (you can set a usage limit). The Billion will email or text you if it's forced to make the switch. For extra flexibility you can also fall back on the Gigabit WAN port.

As for performance, the Billion was the slowest of the bunch, delivering 290 Mbps. It also suffered the most during our long-range test, with the speed dropping 76 percent when moving upstairs.

Bottom line. Along with a built-in ADSL2+ modem, Billion's BiPAC 8800AXL can automatically fall back on mobile broadband if your DSL connection goes down.



\$239 / BILLION
au.billion.com

PROS 3G/4G fallback
CONS Weakest signal; no advanced parental features



OUTSTANDING



VERY GOOD



GOOD



FLAWED



UNACCEPTABLE

57

SEPTEMBER 2014
www.macworld.com.au

D-Link AC1900 DIR-880L

This 802.11ac dual-band Wi-Fi router can run 2.4 and 5GHz Wi-Fi networks simultaneously, plus it also features four Gigabit Ethernet ports. It's not a DSL modem, so you'll need to connect it to your existing broadband modem via the Gigabit Ethernet WAN port, which is fast enough to handle the NBN when it arrives on your doorstep.

This D-Link features a USB 3.0 port on the back and USB 2.0 on the side, with support for USB printers, scanners and storage. There's a mydlink SharePort app available for accessing files from iOS and Android devices, plus the router supports Samba network shares and DLNA for streaming content around your home. You can also access files remotely via the internet.

Built-in parental controls let you block specific websites at certain times of day, but they're blanket rules and you can't customise them for different devices around your home. Along with this you can schedule the Wi-Fi networks to switch off at certain times of day. You can also create a guest Wi-Fi network to grant visitors internet access, but not access to devices on your home network.

Dip into the advanced settings and you'll find VPN, static routes and Dynamic DNS support along with a Quality of Service engine, which lets you prioritise connected devices. This is handy if you're relying on your Wi-Fi to stream music and video to the lounge room.

Thanks to the impressive external antenna array, which supports beamforming to track your devices, the D-Link offers the strongest signal of the bunch. It hit 318 Mbps up close and in our long-range test, moving upstairs, the speed only dropped 59 percent. At this distance, it outpaced the AirPort Extreme and was the fastest of the bunch.

Bottom line. Blessed with an external three-antenna array, D-Link's DIR-880L is well-suited to homes where Wi-Fi signal strength is an issue.



Apple AirPort Extreme (6th generation)

The monolithic AirPort Extreme is an 802.11ac dual-band Wi-Fi router. It's designed to complement the new 802.11ac-compatible Macs, yet is backwards compatible with 802.11a/b/g/n devices. The AirPort Extreme can run 2.4 and 5GHz Wi-Fi networks simultaneously, plus it also features three Gigabit Ethernet ports.

There's no built-in DSL modem, so you'll need to connect it to your existing broadband modem via the Gigabit Ethernet WAN port, which is fast enough to handle the NBN when it comes down your street.

On the back you'll also find a USB 2.0 port for hooking up external storage or a printer. You can access the attached storage via Samba or AFP, but there's no DLNA (Digital Living Network Alliance) or iTunes server support for streaming content around your home. You can also access the storage remotely over the internet. If you're after in-built storage, look to Apple's latest Time Capsule, which also offers 802.11ac Wi-Fi.

While other wireless routers are configured via a web browser, this one relies on Apple's AirPort Utility – which is preinstalled on Macs and also available for iOS and Windows. While there are no parental controls or content filtering features, the AirPort Extreme does let you control when individual devices can access the network. There are no VPN (virtual private network), Quality of Service or static routes options, but you can set up port forwarding, Dynamic DNS and a guest Wi-Fi network.

When it comes to performance, the AirPort Extreme features a beamforming antenna array, which lets it target your devices. Up close, it's the fastest of this group, hitting 358 Mbps (megabits per second). In our long-range test, moving upstairs, the speed dropped by 71 percent, which saw it outperformed by the D-Link.

Bottom line. Apple's new-look AirPort Extreme is the fastest of the group, but falls short on advanced features.



\$299.95 / D-LINK
www.dlink.com.au

PROS Strong signal

CONS No advanced parental features



\$249 / APPLE
www.apple.com/au

PROS Fast speeds; AFP networking

CONS Limited advanced features



Apple Retina MacBook Pro (mid 2014)

Update offers slightly better CPU performance.

In July, Apple updated its Retina MacBook Pro line, and while the new models are identical on the outside to their 13in and 15in predecessors, released late last year, the 'mid-2014' models feature processors that are just a little bit faster. As modest as these internal improvements are, they do provide more performance bang for the buck.

The new lineup includes five standard configurations. The \$1599 system has a 13in Retina display, a 2.6GHz dual-core Core i5 processor (up from 2.4GHz in the previous \$1599 model), 128GB of PCIe-based flash storage, and 8GB of RAM (up from 4GB). For \$1849, you get the same system, but with 256GB of flash storage. The high-end 13in model, at \$2199, includes a 2.8GHz dual-core Core i5 processor (up from 2.6GHz in the previous high-end 13in model), 8GB of RAM, and 512GB of fast flash storage.

The new 15in models come in two flavours. There's a \$2499 system with a 2.2GHz quad-core Core i7 processor (up from 2.0GHz in the previous \$2499 model), 16GB of RAM, and 256GB of flash storage. At \$2999, the high-end 15in MacBook Pro is \$200 less than the previous high-end model and has a 2.5GHz quad-core

Core i7 processor (compared to 2.3GHz previously), 16GB of RAM and 512GB of flash storage. Unlike the rest of the mid-2014 models, which use integrated graphics (Intel Iris in the 13in models and Intel Iris Pro in the 15in), the high-end 15in MacBook Pro adds discrete graphics in the form of an nVidia GeForce GT 750M GPU with 2GB of dedicated GDDR5 memory.

DESIGN FEATURES

Aside from the minor boosts in processor speed, and the low-end 13in model's additional RAM, the latest MacBook Pros with Retina display stick with the design introduced in late 2013. The late-2013 13in MacBook Pros were slightly lighter and thinner than previous models, and all late-2013 models introduced Intel's Haswell processors, Thunderbolt 2 and 802.11ac Wi-Fi to the MacBook Pro line.

As with the late-2013 models, the 13in and 15in mid-2014 models include two USB 3.0 ports, two Thunderbolt 2 ports, an SDXC card slot, an HDMI port, and a headphone jack that supports the microphone and remote on headphones with an Apple-style inline remote/mic module.

The Retina MacBook Pro isn't built with upgradability in mind. In fact, you'll

need a special Pentalobe screwdriver just to get the back cover off. RAM is soldered to the motherboard, so if you think you might ever need more than the stock amount, it's important to configure your MacBook Pro with that extra RAM at the time of purchase. The 13in models all come standard with a healthy 8GB of RAM, while the 15in models come with a very generous 16GB; configuring the 13in model with 16GB costs an additional \$240. Processor upgrades and flash-storage upgrades (up to 1TB) are also available at the time of purchase.

The 13in Retina MacBook Pro has a glossy 13.3in (diagonal) IPS screen with LED backlighting and a native resolution of 2560 by 1600 pixels. The 15in MacBook Pro with Retina display sports a 15.4in IPS LED screen with a 2880 x 1800 resolution. By default, both displays are set to pixel-doubled mode: 1280 x 800 for the 13in models, and 1440 x 900 on the 15in laptops.

As mentioned in previous reviews, the Retina displays look great. Icons and user-interface elements are so sharp and clear that I sometimes find myself just admiring the contents of the Dock and menu bar. If you want to change the resolution to fit more windows, images and documents



on-screen, OS X's Displays System Preferences allow you to choose between one of five available resolutions. The Best for Display setting is the default pixel-doubled resolution. Interestingly, the highest resolution setting on the 13in is 1680 x 1050; on the 15in, the highest available resolution setting is 1920 by 1280. To use these displays at their native resolutions you'll need to turn to a third-party utility such as EasyRes. However, icons and text are terribly small when using these screens at native resolution – I assume Apple doesn't think anyone in their right mind would want that kind of user experience.

PERFORMANCE

Given such modest internal changes, we didn't expect, or find, significant speed differences between the mid-2014 MacBook Pros and their late-2013 predecessors.

Each of the newer models was faster than its corresponding predecessor in our application tests, including Photoshop, Aperture, iTunes, iPhoto, iMovie and Handbrake. Unfortunately, all of the newer models were also slower than their predecessors in our copy, zip and unzip tests. In fact, only on the

entry-level 13in and 15in mid-2014 models were the processor gains enough to keep the new systems' overall Speedmark 9 score above the scores of the late-2013 systems.

Comparing the 13in and 15in models' performance, you can see that the quad-core processors used in the larger laptops helped the low- and high-end 15in MacBook Pros post around 60 percent higher Speedmark 9 scores than their 13in counterparts.

BATTERY LIFE

To test the battery life in these new portables, we looped a playlist of shows downloaded from the iTunes store. We turned off Wi-Fi and set the screen brightness to 200 cd/m2. The 2.6GHz 13in model lasted just over 10 hours in this test while the 2.8GHz model lasted just under nine and a half hours. The 15in models lasted a respectable seven hours. The most recent MacBook Air, for comparison's sake, lasted over 12 hours in this test.

BOTTOM LINE

With beautiful high-resolution screens, fast PCIe-connected flash storage, Thunderbolt 2, 802.11ac Wi-Fi, and USB 3.0, Apple's latest MacBook Pros with Retina display

are fantastic machines. And while the changes to the latest models are modest, they do provide higher performance in most applications than previous models, more RAM in the low-end models, and lower prices at the high-end.

– JAMES GALBRAITH



APPLE / 13in Retina / 2.6GHz
www.apple.com/au

\$1599 PROS More RAM CONS Upgradeability



APPLE / 13in Retina / 2.8GHz
www.apple.com/au

\$2199 PROS Processor boost CONS Upgradeability



APPLE / 15in Retina / 2.2GHz
www.apple.com/au

\$2499 PROS Processor boost CONS Upgradeability



APPLE / 15in Retina / 2.5GHz
www.apple.com/au

\$2999 PROS Price drop CONS Upgradeability

Oyen Digital Shadow Mini

The Shadow Mini is a great value for 1TB of solid-state storage, and you don't have to compromise on speed, either. The small size makes it easy to bring with you anywhere.

Currently, there are only a handful of portable SSDs on the market with 1TB of storage capacity. Demand for such a drive isn't huge, and they tend to be expensive. But of the 1TB external SSDs that do exist, the Shadow Mini from Oyen Digital falls in the 'affordable' end of the price range.

The aluminium enclosure has a super simple design that's available two colours, black or silver. A USB 3.0 port is on one end of the Shadow Mini, next to a small LED that blinks when the drive's being accessed. The drive manufacturer and name are printed on the top, forgoing any mention of capacity.

The Shadow Mini is indeed quite mini. It's smaller than OWC's Envoy Pro EX, but a little bigger than Silicon Power's T11. The drive can get toasty when performing a lot of reading and writing, but it wasn't uncomfortable for me to hold, unlike the T11.

I didn't expect the Shadow Mini to get very fast speeds, but I was pleasantly surprised when it blew my expectations out of the water. It's in the same speed range as far more expensive drives like the Monster Digital OverDrive Thunderbolt or LaCie Rugged Thunderbolt. Not only is it fast, the performance was also highly consistent, a good quality in any drive.

Bottom line. Numbers speak for themselves. The Shadow Mini is at a great price, especially considering the limited selection of 1TB portable SSDs on the market. You can find USB 3.0 ports on just about any modern computer, and the Shadow Mini is plenty fast too. On top of that, the drive is small enough to fit in just about any pocket, bag, nook or cranny. Just don't lose it.

— ALBERT FILICE

Write File

Oyen Digital Shadow Mini	349
Elgato Thunderbolt Drive+	344
LaCie Rugged Thunderbolt	341
Monster Digital OverDrive Thunderbolt	372
Seagate Backup Plus Fast	229

Read File

Oyen Digital Shadow Mini	355
Elgato Thunderbolt Drive+	350
LaCie Rugged Thunderbolt	382
Monster Digital OverDrive Thunderbolt	408
Seagate Backup Plus Fast	234

Results are in MBps; larger numbers/longer bars are better.



Photos from Michael Homnick.



OYEN DIGITAL

www.oyendigital.com

PROS Smaller and light; fast with a large capacity; great price per Gigabyte

CONS None

US\$589.95 + SHIPPING



iDevices Kitchen Thermometer Mini

The Kitchen Thermometer Mini pairs with an iOS app to pick preset temperatures and alert you when your meat is done.

It's really neat to see how smartphone integration can enhance the various tools and appliances we use around the home, but not everything necessarily needs a phone-centric boost.

Luckily, the Kitchen Thermometer Mini from iDevices delivers 'smart' features that help you cook with precision without having to stare at the oven or stovetop. Not every aspect is as intelligent as it should be, but there's real benefit to the iPhone connection here.

SMART SIZZLING

The Thermometer Mini itself is a small disc with a diameter of 4.45cm, which rests in a magnetic base and rotates 180 degrees to change the viewing angle. Plugged into that is the probe, which has a flexible, metal-lined 1.2m cord – so you can, say, mount the thermometer to your fridge and have the cord safely running into your closed oven.

You'll need an iOS device and the free iDevices Connected app to complete the equation, and the Kitchen Thermometer Mini connects wirelessly via Bluetooth through the app itself. As such, you'll be able to see the current meat temperature on your device while away from the kitchen, assuming you're in range of the thermometer.

The face of the Mini features a button surrounded by a flashing LED

light, which shows the connection status at first before displaying a certain colour based on how done the meat is in comparison to the selected preset.

Accompanying the flashing light is a beeping sound, as well as notifications on your iOS device, letting you leave the room and still be alerted. Aside from pressing the physical button on the thermometer to pair it to a device, everything else happens within the app, including selecting a preset, looking up recipes and scoping out photos of meals cooked by other iDevice accessory owners around the world.

Being able to pick a preset temperature from within the app is a handy feature.


But the real value comes from being able to stick the probe into a raw roast or hunk of meat before it hits the oven or pan, leave the kitchen entirely and be alerted when your protein matches the desired preset temperature.

UNINTELLIGENT DESIGN

Range can be an issue, however. iDevices pegs the Bluetooth connectivity range at up to 45m between your iPhone and the thermometer, but in my apartment, I could only get about 10m away before the connection failed – which meant my living room was out-of-bounds if I wanted a timely alert.

After using the Kitchen Thermometer Mini for the first time, a few days passed until I needed it again – to check the temperature of a roast that had just slow-cooked for eight hours. At that point, I pulled out the thermometer, pressed the button, and... nothing. It was dead.

It seems that the Mini's faulty auto-shut-off function is to blame. You can turn the Mini off manually by pressing the button in for three seconds, but if you don't do so, it will continuously attempt to pair until the battery dies.

Bottom line. Frustrating as the auto-shut-off and potential range issues are, the Kitchen Thermometer Mini really shows the value of connecting your phone or tablet to a usually quite simple kitchen utensil. It can't guarantee a delicious meal, but it'll at least ensure well-cooked proteins while you pay minimal attention. 

– ANDREW HAYWARD



IDEVICES
www.idevicesinc.com

PROS Notification when meat is fully cooked; handy presets save guesswork

CONS Range varies significantly by space; broken auto-shut-off kills batteries

US\$39.99 + SHIPPING



BlueAnt PUMP HD Sportsbuds

Released earlier this year by wireless audio company BlueAnt, the PUMP HD Sportsbuds promise to deliver "unrivalled audio for intense activity and extreme conditions". And, despite a few hitches, these in-ear headphones go a long way to fulfilling their promise.

The earphones are made from 'military-grade' materials such as Kevlar from bullet-proof vests, and Teflon, which repels liquids. As a result, the earphones are highly resistant to elements such as water, dust and sweat. They can even be immersed in water for cleaning purposes – for up to 30 minutes. Expectedly, as a BlueAnt device, there is dedicated support to receive calls via the built-in microphone.

The over-the-ear design makes the PUMP HDs incredibly good at staying in place, being further aided by the detachable stabilisers.

I took the earphones on a fast, high-intensity 3.5km run across a track that included roads and footpaths where I had to often turn my head quickly to check for cars and pedestrians. The earphones did not once feel like they were going to fall out, and were in fact barely noticeable due to the lightweight design. This is despite the earphones' somewhat bulky look.


After the run, I was able to rinse the earphones under the tap and they were then clean and ready to use again.

The earphones also come with three different sized earpiece tips, which block out most, if not all, outside noise. There is also one set of 'awareness tips', which allow outside noise to be heard much more easily – useful for people who cycle or run outdoors. The choice of size helps to keep the earphones in, and also allows a tighter fit, which achieves better sound quality.

The sound quality is actually quite good for a wireless earphone, especially if you have the correct-sized earpiece tip connected. The 'Energize HD' audio is quite clear, with some nice clarity among higher tones, and decent bass levels. When the volume level goes above halfway on an iPhone, however, the sound quality is reduced and eventually leads to near-distortion. But this is not a problem, as I found that the sound is quite loud right up to the halfway level, even while running outside with cars driving past on a highway.

The battery life is quite good, with eight hours achievable from a full two-hour charge, with the battery level visible on your iPhone when connected.

One problem appears to be the Bluetooth, which claims to have a 100-foot (33-metre) range. Bluetooth normally has approximately a 30-foot (nine-metre) range, so I decided to test it. Unfortunately, the PUMP HDs would start cutting out after about 10 metres, and I tested them both indoors and outdoors. So you definitely need your phone in your pocket or next to you while at the gym. Perhaps performance is better on newer phones, as I used an iPhone 4s and Galaxy S3 when testing.

Bottom line. Overall, I found these earphones performed very well for their purpose – rigorous exercise and exposure to the elements. If you find your earphones constantly letting you down during any exercise, sport or physical activity, then the PUMP HDs are definitely worth a try. 

– HARRY TUNNECLIFFE



BLUEANT

www.blueantpump.com

PROS Water, dust and sweat resistant; won't fall out; good overall sound quality

CONS Bulky looking; limited Bluetooth range; sound quality drops at high levels

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Google Chromecast

A very different beast to the Apple TV, Google's tiny streaming media stick brings a wealth of internet video services to your television.

The Chromecast isn't your typical set-top box, it's simply a dongle that plugs into the HDMI input on your television. It draws power via a micro-USB port, connected to either your television's USB port or the supplied AC adaptor. There's no Ethernet port; instead it joins your home Wi-Fi network (802.11n, 2.4 GHz only).

Unlike the Apple TV, there's no remote control in the box. The Chromecast is useless unless you have a computer, smartphone or tablet to stream video from. Compatible iOS apps display the Chromecast icon, similar to Apple's AirPlay streaming ecosystem. For now Australians can watch YouTube, Google Play, EzyFlix, Quickflix, Plex and Foxtel Presto on the Chromecast, with the ABC's iView on the way.

If you're looking for an easy way to sneak into Netflix, the Chromecast is more troublesome than an Apple TV. It's easy to change the DNS settings on an Apple TV to trick Netflix, but with a Chromecast you need to change them in your modem/router. You also need to edit your IP routing tables to block access to Google's DNS servers, a feature that some modem/routers don't support.

The Chromecast's lack of a remote control means that viewers always need a computer or iGadget at hand, which is frustrating if you don't want to hand over a device just so that children can watch internet video on the television.


The Chromecast's strength is it provides access to third-party video services, especially subscription content. The Apple TV is an entertainment wasteland for Australians once you look beyond YouTube and the Apple ecosystem. Quickflix is aiming to be the first Aussie service on the Apple TV, hopefully by the end of the year, but third-party services are lining up to embrace the Chromecast.

You may argue that AirPlay streaming from iGadgets makes up for the Apple TV's lack of third-party content, but this solution falls short when it comes to picture quality. AirPlay streaming is deliberately disabled in many iOS apps. Even if you use screen mirroring to send video from your iGadget to your television via the Apple TV, you're only watching mobile-quality video on a big screen.

The Chromecast's special trick is that it can stream video directly from the internet rather than using a smartphone or tablet as the middleman. For example, once you use the Netflix app on your iPhone to send video to the Chromecast, the Chromecast creates a direct link to the Netflix servers to pull down TV-quality video. It looks much better than if you'd sent mobile-quality video to the Apple TV via AirPlay. At this point, you can use your iGadget for other tasks, with the Netflix app running in the background as a remote control.

This improved quality is most noticeable on Netflix, because it delivers high-definition video and 5.1-channel surround sound to the Chromecast. The difference is much less striking with standard-definition Australian services like Presto or Quickflix, although Quickflix is preparing to offer HD video.

The Chromecast also supports screen mirroring, but only from Android devices at this stage. iGadget owners can mirror their screen to the Apple TV, which does a better job than the Chromecast with graphics-intensive apps such as *Real Racing 3*. You can also stream Chrome browser tabs to the Chromecast from your Mac or PC.

Bottom line. If you're an Android owner secretly jealous of the AirPlay ecosystem, then Google's Chromecast is the lounge room companion you've been waiting for. But even the Apple faithful may appreciate the Chromecast's ability to bring non-Apple content to the big screen. 

— ADAM TURNER



GOOGLE

www.google.com.au/chrome

PROS Access to more video services than Apple TV

CONS No remote control

\$49

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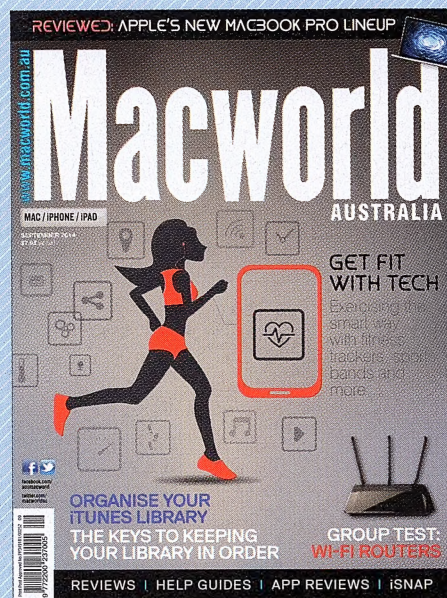
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ELLEN CHISA

Project manager, Kickstarter

WHAT DO YOU DO?

I work on the backer experience for Kickstarter. I try to make everyone else's job easier.

WHAT HARDWARE DO YOU USE?

I use a 13in MacBook Air – the size just feels right for me. And I prefer the way the keyboard feels. I never use an external monitor because the amount of screen space overwhelms me.

I've never been much of a tablet person. If I'm on a computer, I want to be productive. But I have a Microsoft Surface RT in the kitchen that I use to pull up recipes while I'm cooking.

Right now I use an iPhone 5s. For a couple of years, I worked on a Windows Phone and carried an HTC 8X. After dropping and shattering two within a year, I decided it was time for something else.

AND WHAT SOFTWARE?

My favourite software is FuzzyClock. I also use f.lux, which helps prevent me from staying up all night.

Most of what I do is on the internet. Chrome is my primary browser. I also use a Chrome extension called Web Timer, which informs me that I spend nearly two hours per day in Gmail. My second most used website is Twitter.

For product management, I use Trello. I use it to keep myself organised, too. I have one board that has columns for each type of thing I do: web stuff, writing, art.

I also use Google Docs to make notes, and Balsamiq to make mockups. Sometimes I'll use Photoshop to modify something more detailed. I use Sublime Text if I'm editing code, and GitHub or Terminal to check things in. We use Campfire to keep up with each other during the day.

My writing process uses different tools. I draft everything in Day One because it feels like a journal, plus I can read the notes in the iOS app while I'm out. I copy-paste everything into Hemingway to edit. Then I either move it into my blog, which uses WordPress or to Medium.

A few other favourite things: Pinterest for procrastinating, Spotify for listening to music, Pocket for saving articles I'll probably never read, Goodreads for documenting books that I do read, and Product Hunt for doing research on cool new stuff.


WHAT IS YOUR DREAM SETUP?

This will sound funny, but I wish I had a PC to run PowerPoint on. Office for Mac isn't the same. ☹️

Interview courtesy of The Setup (usesthis.com; Twitter: @usesthis).



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